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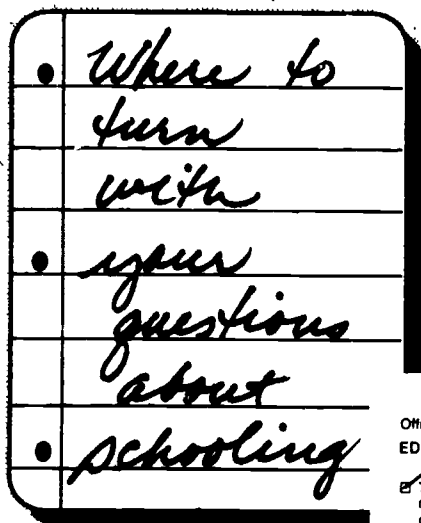
ABSTRACT

This guide explains what the Educational Resources Information Center (ERIC) database is and how it can be used by parents to learn more about schooling and parenting. The guide also presents descriptions of 55 articles and documents that can be obtained through ERIC. The cited resources are particularly relevant to parents' concerns about meeting children's basic needs, communicating with school staff, helping students learn, and serving as an advisor or advocate. In addition, the guide provides a separate category of ERIC resources for Spanish-speaking parents. For parents with the necessary energy and academic skills, searching the ERIC database will provide information on selected topics. One chapter describes in detail a manual ERIC search. The guide also discusses the theory of computer searching with CD-ROM (compact disc, read-only memory) and lists prerequisite computer skills. Separate sections of the guide examine ERIC digests, ERIC resumes, the ERIC system, ordering ERIC documents, the range of information about parents in the ERIC database, and the tools for manual or computer searching (such as the Thesaurus of ERIC Descriptors, ERIC indexes and compact disks). ERIC clearinghouses and institutions with complete ERIC collections are listed. (DHP)

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ED 307102

A PARENT'S GUIDE TO THE **ERIC** DATABASE



By Craig B. Howley
Phyllis Stowers
Patricia Cahape

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Clearinghouse on Rural Education and Small Schools

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TO THE ERIC DATABASE

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PAT CAHAPE

MARCH 1989

ERIC CLEARINGHOUSE
ON
RURAL EDUCATION AND SMALL SCHOOLS

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QUICK REFERENCE PAGE TO THE ERIC/CRESS PARENTS' GUIDE

We have modeled this *Guide* on computer software documentation, and the sections are intended to take you to whatever level of use you desire. You don't need to read the *Guide* straight through. If you encounter unfamiliar terms, consult the Glossary. If you are interested in ...

PUBLICATIONS

- ... **selected publications** for parents, see pages 5-26.
- ... **all publications** for and about parents, see pages 27-28.

HOW-TO INFORMATION

- ... **ordering** publications from ERIC, see pages 29-31.
- ... getting the most out of an ERIC **resume**, see pages 75-77.
- ... doing ERIC **searches**, see pages 49-61.
- ... locating ERIC **collections**, see pages 63-73.

KNOWLEDGE ABOUT ERIC

- ... a description of the whole ERIC **system**, see pages 79-80.
- ... descriptions of each ERIC **clearinghouse**, see pages 33-39.
- ... **definitions** of ERIC terms (glossary), see pages 81-85.

FOREWORD

As a parent and as a teacher (roles that are closely bound together, in my mind), I have used the ERIC (Educational Resources Information Center) system for a long time, and I like it. The ERIC system can be **both** an appealing and reasonable response to the bafflement many of us feel when confronted with schools, on the one hand, and our children, on the other. It's not always easy to see how the two fit together.

Parents, in fact, want objective answers to pretty specific questions, and local educators cannot always supply the best responses. Usually, local educators are too much invested in particular problems and solutions. I speak from the experience of being a parent, local educator, writer, and student of schooling. I have faith in **both** educators and parents (and even in educational researchers). Almost all of us want what is best for children; but we live in a tough world, where good alternatives are seldom close at hand. The ERIC system is a refreshing exception.

Although the ERIC database was first developed as a professional resource, it can be more than that, because **teaching** has so much to do with **parenting**. Parents need independent sources of information if they are to make wise choices—or indeed, any choices—about the schooling of their children. The ERIC system is a good place for parents to turn for answers—not perfect, mind you—but still very good. The material to be found there is about as varied and as rich as the material in any library that contains three-quarters of a million documents.

We are, apparently, becoming a society of computer-users. Computers are no longer strange and mysterious, and we have begun to view them as the tools they are. Some observers who enjoy theorizing about computers believe them to be tools for openness and democratization. I don't know about that, myself, but you might say that viewpoint is the premise of this *Guide*.

Certainly parents can search the ERIC database, and the use of computers will make it easier. A little self-training may be necessary, however. This *Guide* has been developed for parents as a start. Parents who pose their own questions about schooling and find the answers in ERIC reclaim a measure of choice in the education of their own children.

Craig B. Howley
Associate Director
ERIC Clearinghouse on Rural Education and Small Schools

INTRODUCTION

This *Guide* is written especially with parents in mind. It has two main purposes:

- to explain what the ERIC database is, and
- to explain how ERIC can be used to learn more about schooling.

In addition, the *Guide* describes some of the articles and publications developed especially for parents that you can get through ERIC.

The first sections of the *Guide* reflect these main purposes. They show you what the database is and contain brief descriptions of 55 articles, brochures, and guides developed for parents. They also show you how to order these—or any other ERIC Documents.

Each of us views the world in unique ways, however, and the ERIC collection reflects that diversity. There are thousands of articles that might be of interest to you **in particular**. The remaining sections explain how to find them.

The ERIC System

The Educational Resources Information Center, or ERIC, is a kind of national library of articles and documents about schooling, education, and related topics. Established in 1966, the ERIC system describes **articles** in over 780 journals and magazines devoted to education, and it describes and makes available (at a very reasonable cost) almost all important **documents** about education.

Many of the documents are reports and studies, others are brochures and pamphlets for special audiences (like parents), and still others are training materials, manuals, and guides. Though many of these documents are copyrighted, the authors have in most cases given the ERIC system the right to distribute photocopies of the documents to whomever asks for them. You don't need to be a teacher or school administrator to use ERIC.

You can access the ERIC system on your own; you do not need to go through your local school or get special permission; and you do not need a great deal of expertise. You do need a few skills—which this *Guide* will help you learn. You also need to have some questions about your children, about education in general, or about schooling in particular. It helps to know something about **how to ask questions**, but this is a skill that you can best develop through experience. See the sections on searching for some hints.

If you use the ERIC system, you will find that many of your questions **do have definite answers**; you will also find that many of your questions **do not have simple answers**, or **have contradictory answers**; and you may find that still others **have not even been asked**. Remember, however, that all questions are related to one another. In the process of seeking an answer, you may find that you change your question.

You will also find that articles and documents in the ERIC collection have been written for many different audiences, from those who make policies about education, to elementary school teachers, to college professors, to parents. Don't let the differences in the intended audience and quality of materials put you off; often the research you find difficult to understand in an original report has been presented more straightforwardly in another article or document. Keep looking.

Using the ERIC system requires that you go to a library, probably an **academic** library, perhaps one of those located at the colleges and universities listed in the section of this *Guide* that gives the location of complete ERIC collections. In case you didn't know, virtually all of these institutions allow community members to use their library facilities.

Why? Universities and colleges view **community service** as one of their primary missions. So don't be bashful. Certainly, if your concern as a parent is education—an endeavor that affects the entire community—you belong in those facilities, and you can expect to be welcomed.

In most places, the **reference librarian** will gladly show you where the paper copies of journals are kept, where journals on microfilm are kept, and where the ERIC microfiche collection is located. They will also show you where to find the *Thesaurus of ERIC Descriptors*, the *Resources in Education (RIE)*, and the *Current Index to Journals in Education (CIJE)*. If the library has a CD-ROM ("compact disk, read-only-memory") the librarian may have time to introduce you to its use. If not, the chances are good that the staff have prepared a leaflet that explains briefly what you need to do to use the system.

On your first visit, go prepared with a question you want to answer, and plan on spending an afternoon. You may need that much time just to get acquainted with the library and its resources. Don't be afraid to ask for help—that's what reference librarians are dedicated to giving their clients.

Once you identify the articles and documents you want to read, you may need help finding them. This will be especially true if the library you visit does not keep back issues of journals on microfilm. Missing or mutilated journal issues are common in paper collections.

INTRODUCTION

The reference librarian can help you order paper copies of articles via interlibrary loan or from University Microfilm Incorporated (UMI). This service is slow, and it is more expensive than a similar service provided by the ERIC Document Reproduction Service (EDRS) in the case of *RIE* documents.

When you do find the articles and documents you want to read, scan them to see if they really are useful to you. Make paper copies of the best to take home.

Microfiche reader/printers and microfilm reader/printers are not difficult to use, but they require some getting used to if you've never worked with them before. Take your time, again, and ask for help when you need it. Other library users can often be as much help with the use of equipment as the library staff. Finally, expect to pay a reasonable fee for making paper copies of journal articles and documents—\$.10 per page is typical.

SECTION 1

Fifty-Five Articles and Documents for Parents

When we talk about how parents are involved with schooling, we refer to a variety of activities. Most of those who have studied this topic have suggested that four to six categories sum up the variety pretty well. This section of the *Guide* presents descriptions of 55 articles and documents in the ERIC collection (officially known as the ERIC database), organized by four types:

- meeting children's basic needs,
- communicating with school staff,
- helping students learn, and
- serving as an advocate or advisor.

In addition, we have included a separate category of ERIC resources developed especially for **Spanish-speaking** parents. It is said that the United States is the largest Spanish-speaking country in the world. Many of the resources in the ERIC database acknowledge this fact. A few of these resources, developed for parents, are included below.

You can find more information about how to use the ERIC database in subsequent sections of this *Guide*. There you can learn about searching the database yourself for the information that interests you most.

Information about each article or document in this section is given in a standard format. If you take several minutes to read about that format, it will be much easier for you to use the database. If you come across unfamiliar terms (for example, "blow backs"), consult the glossary.

Let's take a look at two examples, one for articles and one for documents. First, the article:

AN: EJ343182

AU: Rosenberg, Ellen

TI: How Parents Can Help Ease the "Back to School" Jitters.

JN: PTA-Today; v12 n1 p13 Oct 1986

AB: Usually, children are glad to see the summer come to an end. Some are not. Here's how to help. (CB)

The upper-case abbreviations stand for particular sorts of information, as follows:

"AN:" This field indicates the ERIC **accession number**. (A "field" is the space reserved for particular information, so we have "author fields," "title fields," and so forth.) The accession number is a two-letter prefix and a six-digit identification number. The prefix, "EJ," stands for **ERIC Journal**. The "EJ" alerts you immediately to the fact that this resource is an **article**.

"AU:" As you might expect, this field stands for individual **author**, last name first. Not all authors are individuals, however. Sometimes they are institutions. This abbreviation is reserved for **individual authors**.

"TI:" This field gives the **title** of the article.

"JN:" This field gives the name of the **journal** in which the article appeared, together with the volume number, issue number, pages, and month of publication.

"AB:" This is the **abstract** field. It presents a short description of the article. The abstracts in this *Guide* have been edited to keep them short, but they are based on the longer abstracts that appear in the ERIC database. Incidentally, the two letters that end each abstract are the initials of the person who wrote the original abstract.

Now let's turn to an ERIC document:

AN: ED281966

AU: Cano, Luis-R.

TI: Helping Your Child Learn: A Parents' Guide + Ayudando a Su Hijo a Aprender: Una Guia para los Padres.

PR: EDRS Price MF01/PC02 Plus Postage

PG: 49

AB: Here are ten ways to help your children learn better at school, presented in both English and Spanish. Topics include scheduling study time; talking to the teacher; and tips for working parents. A comic strip and worksheets to help students develop good study habits and achieve goals are included. (KH)

LV: 1

Now let's look at what the abbreviations mean in the descriptions of our ERIC documents:

"AN:" Again, this stands for accession number, but notice that the two-letter prefix is "ED" (for **ERIC document**). The ED prefix also alerts you to the fact that the document is probably available as either a paper-copy blowback or a microfiche, or as a microfiche only (see the discussion of "I.V.:" below, for clarification of this point).

"AU:" As before, this stands for individual author. For some of the ED documents listed here, there are no individual authors. Some of the documents below do not, therefore, have an author field.

"TI:" This field, again, gives the title, in this case the title of the ERIC document.

"PR:" This is the price field. Within the field, "MF" and "PC" stand for "Microfiche" and "Paper Copy." The attached numbers (as in PC02) help you calculate the EDRS price. For example, paper copies are currently priced in units of 25 pages, at \$2.00 for each 25-page unit. The symbol "PC02" means a paper copy of the document costs two times \$2.00, that is, \$4.00.

"PG:" This field gives the total number of pages in paper copies, or frames on microfiche.

"AB:" This, again, is the abstract field, which gives a short description of the document.

"LV:" This field describes the level of document availability from The ERIC Document Reproduction Service (EDRS).

Level 1 availability means that documents are available from EDRS as **both** paper-copy blowbacks and microfiche. Of the documents listed below, most are level 1.

Level 2 availability means that documents are available from EDRS as **microfiche only**. If you want paper copies of these documents, you cannot get them from EDRS. Of the documents listed below, a few are level 2.

This entry is a bit different from the previous one. The differences center on the fact that ERIC documents are almost always available in a format different from the journal articles. Most ERIC documents

(but not journal articles) have been put on **microfiche** by the ERIC system.

Microfiche are pieces of film containing miniaturized photographs of each page of a given document. Special microfiche readers and reader/printers reproduce full-size copies of the document (called, curiously enough, "blowbacks"). Blowbacks are not beautiful, but they are readable and quite inexpensive (\$2.00 for each 25 pages from EDRS).

You can get them for a modest fee by writing to the ERIC Document Reproduction Service (EDRS). Instructions for doing this can be found in Section 3 of the *Guide*.

You can also visit many college and university libraries and make copies of the document yourself. That's because many academic libraries have complete collections of all ERIC microfiche. Most libraries currently charge \$0.10 (10 cents) per page for paper copies made on their reader/printers.

Summary of Information About Descriptions

- The fields that describe articles and journals are similar.
- For ERIC documents (ED accession numbers), pay particular attention to what the price and level fields tell you.
- Consult a librarian to help you get copies of EJ articles. There are a number of easy alternatives. See Section 3, below.
- Copies of ED documents can be ordered through EDRS. When ordering, be sure to pay attention to the level of availability. Paper copies of level 2 documents are not available from EDRS, although microfiche copies are.

The documents that have "AN" numbers beginning with "ED" are available from the ERIC Document Reproduction Service (EDRS). Again, you can find ordering information in Section 3 of the *Guide*. Remember that articles with accession numbers ("AN" field) beginning with "EJ" must be ordered through your library.

As noted above, the 55 resources that follow are organized in five categories:

- (1) meeting children's basic needs (8 documents)
- (2) communicating with school staff (5 documents)
- (3) helping students learn (22 documents)
- (4) serving as an advisor or advocate (13 documents)
- (5) selected documents in Spanish (7 documents)

The resources are listed by accession number, from highest (most recent) to lowest (oldest). None of these resources, however, is older than six years.

Meeting Children's Basic Needs

All of these articles and documents are about basic needs—physical, emotional, and social needs—that are related to schooling. Many of them concern child care.

AN: EJ343182
AU: Rosenberg, Ellen
TI: How Parents Can Help Ease the "Back to School" Jitters.
JN: PTA-Today; v12 n1 p13 Oct 1986
AB: Usually, children are glad to see the summer come to an end. Some are not. Here's how to help. (CB)

AN: ED286619
AU: O'Brien, Mary-Parys
TI: Back to Work: A Guide for Expectant and New Working Parents.
PG: 138
AB: The seven chapters of this guide deal with the practical and emotional issues that make it difficult for new parents to meet the demands of both work and family. A unique feature of the guide is a worksheet to help you plan and negotiate maternity or paternity leave. It includes an appendix of resources and readings. (RH)
LV: 1

AN: ED284158
AU: Miller, Beth-R.
TI: Seeing the World through Your Teenager's Eyes.
PR: EDRS Price - MF01/PC01 Plus Postage.
PG: 6
AE: Are you the single parent of a teenager? This pamphlet's for you, with practical steps to help support your efforts. (NB)
LV: 1

AN: ED276507
TI: Baby Basics: A Guide to Your First Weeks as Parents.
PR: EDRS Price MF01/PC03 Plus Postage.
PG: 57
AB: This booklet takes a look at how first-time parents can get organized to deal with an infant. It discusses automobile passenger safety, preparation for the infant's arrival, and caring for the infant. (RH)
LV: 1

AN: ED262908
AU: Long,-Thomas-J.
TI: Advice for Parents of Latchkey Children.
PR: EDRS Price - MF01/PC01 Plus Postage.
LA: English
PG: 21
AB: Here are eleven tips for parents who must leave their children to care for themselves. (RH)
LV: 1

AN: ED255295
AU: Lee,-Judith-A.-B.; Park,-Danielle-N.
TI: Walk a Mile in My Shoes: A Manual on Biological Parents for Foster Parents.
PR: EDRS Price - MF01 Plus Postage. PC Not Available from EDRS.
PG: 42
AB: Are you a foster parent? You have a special set of issues to deal with. This manual can be used as a self-study guide, and it includes resources to help foster parents work out their role with the biological parents of children in their care. (CB)
LV: 2

AN: ED250085
AU: Davis,-Esther-Payne
TI: Communicating, Understanding and Coping: For Children and Adults.
PR: EDRS Price - MF01 Plus Postage. PC Not Available from EDRS.
DT: Guides - Non-classroom (055)

PG: 51

AB: They say talk is cheap; maybe so, but like water, it's essential. This publication is meant to help parents and children recognize the importance of really talking with one another. It covers the topic from infancy through adolescence. (RH)

LV: 2

AN: ED248951

AU: Thomas,-Melissa-L.; Makris,-Barbara-L.

TI: Child Care Consumer Education: A Curriculum for Working Parents.

PR: EDRS Price - MF01 Plus Postage. PC Not Available from EDRS.

PG: 22

AB: Is shopping for daycare confusing? Learn what to look for when selecting child care services. This outline covers everything from the types of child care, to child abuse, to tax credits. (Author/CB)

LV: 2

AN: ED236523

AU: Hale,-Lynelle; Cottone,-Ben

TI: Once a Parent, Always a Parent.

PR: EDRS Price - MF01/PC01 Plus Postage.

PG: 5

AB: This pamphlet is for parents who need to help their children cope with divorce or separation. A discussion of the schooling of the children of divorced parents is included. (EM)

LV: 1

AN: ED234438

AU: Lyle,-Marguerite-R.

TI: Teaching Listening Skills for Parents.

PR: EDRS Price - MF01/PC01 Plus Postage.

PG: 12

AB: Is there something you're overlooking when you deal with your children? Here's a brief treatment of the skill of listening to children. It includes a listening survey you can take yourself. (HTH)

LV: 1

Communicating with School Staff

These articles and documents all concern talking to teachers or principals and getting or giving information about your child.

AN: EJ319267
AU: Krupp,-Judy-Arin; Pauker,-Robert-A.
TI: Preparing Your Child for Junior High.
JN: PTA-Today; v10 n7 p8-9 May 1985
AB: What can you do to help the family cope with junior high school? It's often a rough transition. Here are eight suggestions to help children through this difficult period. (MT)

AN: ED286864
AU: McKinney,-Kay; Paulu,-Nancy
TI: Parents: Here's How To Make School Visits Work.
PR: EDRS Price - MF01/PC01 Plus Postage.
PG: 13
AB: Are your visits to school worthwhile? This pamphlet talks about the purpose of school visits, and includes tips on planning a visit, observing the school atmosphere, discussing student progress, and being a working parent. (CB)
LV: 1

AN: ED275750
TI: Reading Tests: What Does That Score Mean? Standardized Reading Tests.
PR: EDRS Price - MF01/PC01 Plus Postage.
PG: 20
AB: For a long time in our schools, test scores were closely guarded secrets. Now things are different. Do you know what test scores mean? If not, here's a start at understanding the issues. This pamphlet includes five relevant demands parents can make to school officials. (JAZ)
LV: 1

AN: ED248621
AU: Morton,-Kathryn
TI: Someday I May Want to Know about...Parent and Professional Communication: How to Give More and Get More.

PR: EDRS Price - MF01/PC01 Plus Postage.
PG: 7
AB: Although written for parents of handicapped children, many of the observations in this pamphlet make sense for parents of other children. Suggestions for improving cooperation are directed to professionals. It advises parents to be assertive. (CL)
LV: 1

AN: ED237500
AU: Epstein,-Joyce-L.
TI: Effects on Parents of Teacher Practices of Parent Involvement. Report No. 346.
PR: EDRS Price - MF01/PC03 Plus Postage.
PG: 59
AB: Have you thought about why you like some teachers better than others? Here's a study on the topic by a top researcher. It's based on a survey of parents of 1269 students in first, third, and fifth grade classrooms. The findings? Few parents get feedback from school. But some types of feedback make a bigger impression on parents than other types of feedback. Parents give high marks to teachers who send learning materials home, but they are not so impressed by getting newsletters or by their experiences as school volunteers. (Author/CJB)

LV: 1

Helping Students Learn

This category is represented by the largest number of articles and documents. There's a reason, of course: schools are for learning. A number of resources for parents of middle school, junior high, and senior high students focus on such things as study skills and work habits. You can find other information by searching the ERIC database for what you want.

AN: EJ343187
AU: Wilson,-George; Moss,-Joyce
TI: Help Your Child Yearn to Read.
JN: PTA-Today; v12 n1 p21-22 Oct 1986
AB: How do you help young children like reading? This article suggests several books for beginning readers, first-grade readers, and second-grade readers. (CB)

AN: EJ309326
AU: Criscuolo,-Nicholas-P.
TI: The 10 Most Common Questions Parents Ask About Reading.
JN: PTA-Today; v10 n2 p25 Nov 1984
AB: What questions do most parents ask about reading? Do you share their concerns? Find out here. (DF)

AN: EJ300988
AU: Betterman,-Leslie-Sue
TI: It's Never Too Early: A Career/College Guide for Students and Parents.
JN: Journal-of-Career-Education; v10 n4 p234-40 Jun 1984
AB: What will your children do when they grow up? To help you and your children plan ahead, this article gives step-by-step suggestions from grade 8 through grade 12. (JOW)

AN: ED282619
AU: Leavitt,-Midge
TI: Starting School: Happy Beginnings.
PR: EDRS Price - MF01/PC01 Plus Postage.
PG: 13
AB: Help prepare your child for school with these short-term and long-term suggestions, including letting your child help out at home; building an appetite for books and a familiarity with writing; and introducing your child to the school and the bus route. (RH)
LV: 1

AN: ED281966
AU: Cano,-Luis-R.
TI: Helping Your Child Learn: A Parent's Guide + Ayudando a Su Hijo a Aprender: Una Guia para los Padres.
PR: EDRS Price - MF01/PC02 Plus Postage.
PG: 49
AB: Here are ten ways to help your children learn better at school, presented in both English and Spanish. Topics include scheduling study time; talking to the teacher; and tips for working parents. A comic strip and worksheets to help students develop good study habits and achieve goals are included. (KH)
LV: 1

AN: ED280676
TI: Help Your Child Learn Math.
PR: EDRS Price - MF01/PC01 Plus Postage.
PG: 6
AB: Math is an important skill, and recent research says educators need to do a better job of helping students really understand math. Here's how you can help your child in grades one through three—or your older child who may be having a tough time with math—right now. It tells how to help your child with counting, estimating, measuring, and correcting mistakes. It includes a list of do's and don't's. (MNS)
LV: 1

AN: ED278954
TI: Help Your Child Become a Good Reader.
PR: EDRS Price - MF01/PC01 Plus Postage.
DT: Guides - Non-classroom (055)
PG: 5
AB: Here are 15 things you can do to help your child in reading. This pamphlet emphasizes that parents should read aloud to children, talk to them about their experiences, take them to places, limit their television-watching, and keep an eye on their progress. (JD)
LV: 1

AN: ED278049
TI: Help Your Child Learn To Write Well.
PR: EDRS Price - MF01/PC01 Plus Postage.
PG: 5
AB: Like math, writing is a complex subject that research has targeted for improvement in our schools. This pamphlet describes ways you can help your children learn to write well, now. The pamphlet includes 15 tips for helping your children understand the process of writing. The key ingredients of good writing according to the pamphlet are: clear thinking, sufficient time, reading, a meaningful task, interest, practice, and revising. (JD)
LV: 1

AN: ED271223
 AU: Cortez,-Carmen-P.
 TI: Toy Making for Parents and Caregivers.
 PR: EDRS Price - MF01/PC04 Plus Postage.
 PG: 79
 AB: Have you ever made toys for children? It's fun and rewarding, but not necessarily simple. This author talks about the snags of toy making as well as the benefits. Her paper has detailed instructions for making 15 toys, with charts that show how to relate the toy to language learning, using the five senses. (HOD)
 LV: 1

AN: ED266526
 AU: Bradshaw,-Jim; Amundson,-Kristen-J.
 TI: Homework: Helping Students Achieve.
 PR: EDRS Price - MF01/PC01 Plus Postage.
 LA: English
 PG: 16
 AB: If homework is a problem at your house, take a look at this booklet. It talks about why homework is helpful, and it offers specific ways students can improve their homework routines. (PGD)
 LV: 1

AN: ED262374
 AU: Robinson,-Richard-D.
 TI: Children's Reading: What Parents Can Do to Help.
 PR: EDRS Price - MF01/PC01 Plus Postage.
 PG: 22
 AB: Here's another approach to helping children read at home. It includes a 50-item checklist for parents, typical questions asked by parents about reading, along with the answers, and a discussion of points to be considered by parents when planning an interview with the child's teacher. (EL)
 LV: 1

AN: ED261877 (see also ED261876, ED261413, and ED248114)
 TI: The Helping Book: Fifth Grade Math. For Parents of ECIA,

Chapter 1 Fifth Grade Students. Bulletin 1744.

PR: EDRS Price - MF01/PC06 Plus Postage.

PG: 146

AB: This book includes activities to help children practice mathematics skills at home. The treatment is very similar to that taken in most schools. For each skill there are at least two pages of practice plus a basic skills test question. Answer keys are included. (MNS)

LV: 1

AN: ED261876 (see also ED261877, ED261413, and ED248114)

TI: The Helping Book: Fourth Grade Math. For Parents of ECIA, Chapter 1, Fourth Grade Students. Bulletin 1736.

PR: EDRS Price - MF01/PC04 Plus Postage.

PG: 100

AB: Similar in structure and content to the other books in this series. Answer keys are included. (MNS)

LV: 1

AN: ED261413 (see also ED261877, ED261876, and ED248114)

TI: The Helping Book: Fifth Grade Language Arts. For Parents of ECIA, Chapter 1 Fifth Grade Students. Bulletin 1743.

PR: EDRS Price - MF01/PC05 Plus Postage.

PG: 116

AB: These skill-based activities for doing at home focus on reading and writing. This book is similar to the math books in the same series. (HOD)

LV: 1

AN: ED254324

TI: Calendar of Reading, Writing, and Mathematics Skills, Grades K-3, 1984-85. A Guide for Parents.

PR: EDRS Price - MF01/PC02 Plus Postage.

PG: 44

AB: Helping students learn is largely a matter of showing real interest on a routine basis. Here's a structure for establishing that routine, and it's not based on holiday activities, either: the tasks cover a wide range of academics. The last

section relates the activities to other things parents can do on a more or less routine basis. (CB)

LV: 1

AN: ED251530

TI: Helping Your Child Understand the World of Work.

PR: EDRS Price - MF01/PC01 Plus Postage.

PG: 11

AB: Here's another brochure about career planning for parents and children. Three sections describe one state's responsibilities for career education, ways that parents can help their children learn about work; and books about this topic for children and parents (KC)

LV: 1

AN: ED248114 (see also ED261877, ED261876, and ED261413)

TI: The Helping Book: Third Grade Math. Bulletin 1720.

PR: EDRS Price - MF01/PC05 Plus Postage.

PG: 115

AB: This book is similar in structure and content to the other math books in this series. Answer keys are included. (MNS)

LV: 1

AN: ED245783

TI: Preschool through 2nd Grade Learning Activities Designed for Parents to Make and Play with Their Children. The Best of BES—Basic Educational Skills Materials.

PR: EDRS Price - MF01/PC07 Plus Postage.

PG: 151

AB: Here's a more comprehensive treatment of early learning in math and language. It has two sections, one that describes what children of this age should learn, and another that gives about 100 language and math activities to use at home. The directions also show how to vary each activity. (RH)

LV: 1

AN: ED241609

TI: Home Is for Helping.

FIFTY-FIVE ARTICLES AND DOCUMENTS FOR PARENTS

PR: EDRS Price - MF01/PC01 Plus Postage.
DT: Guides - Non-classroom (055)
PG: 25
AB: This booklet shows how life at home relates to learning in school, with an emphasis on math and reading. It stresses the importance of family talk and shared time. There's a bibliography and a discussion of common household items that you can exploit to help your children learn. (DC)
LV: 1

AN: ED240061
AU: Duckett, Jean-C.
TI: Helping Children Develop Good Study Habits: A Parents' Guide.
PR: EDRS Price - MF01/PC01 Plus Postage.
PG: 6
AB: Studying makes a difference, but children learn good study habits only with the guidance and firm supervision of a caring adult. In general, the earlier a regular pattern of dealing with homework assignments can be established, the better. Here are six steps to help you take direct action to that end. (DC)
LV: 1

AN: ED236526
AU: Wolf, Pearl
TI: Parents and Reading: A Guide to Home Activities for Children. Centering On.
PR: EDRS Price - MF01/PC02 Plus Postage.
PG: 36
AB: If you know something about theories of learning, you might find this parents' guide about reading especially interesting. It's based on the work of the Swiss psychologist, Jean Piaget, which it briefly reviews. Books and activities are listed for use with each of his defined stages of growth, and it includes a reading list for parents. (JW)
LV: 1

AN: ED233814
AU: Weinstein, Claire-E.; And-Others
TI: How to Help Your Children Achieve in School.

- PR:** EDRS Price - MF01/PC02 Plus Postage.
PG: 28
AB: Did you know that certain behaviors characterize successful students? It's true, and even students who have always had to struggle can learn those behaviors and get better grades. Five such behaviors are explained in this booklet for parents. (BJD)
LV: 1

Serving as an Advisor or Advocate

Serving as an advisor or advocate is a complex kind of parent involvement. In this role, you try to help other children, your children's school, and the education community in general. It's not easy work. It may be as a member of a committee to assist the school (an advisor), or as an outside advocate for change.

If you're ready to take on this level of involvement, be sure to review these documents. Many of these resources were developed with children who have special needs in mind. Parents have been very involved as advocates and advisors for these children. Much of the information in these resources could be applied to serving as an advisor or advocate of other children.

-
- AN:** EJ351686
TI: Parents as Partners in Education.
Y: 1987
JN: PTA-Today; v12 n5 p4-6 Mar 1987
AB: This brief article can help you talk about the different kinds of parental involvement with other parents and with educators. (CB)

-
- AN:** EJ343746
AU: Gonzalez,-Berta
TI: Schools and the Language Minority Parents: An Optimum Solution.
JN: Catalyst-for-Change; v16 n1 p14-17 Fall 1986
AB: A leadership institute called OPTIMUM is aimed at parents whose native language is not English. The focus is on children, but the institute also helps these parents upgrade their own education. (MLH)

AN: EJ337506
 AU: Seligson,-Michelle
 TI: Child Care for the School-Age Child.
 JN: Phi-Delta-Kappan; v67 n9 p637-40 May 1986
 AB: This article reflects on how schools and communities can address the need for after-school childcare together. (MLH)

AN: ED287244
 AU: Siciliano,-Ellen; And-Others
 TI: Project PIPE and Special Education Quality Indicators. Project PIPE Resource Manual: A Parent Educator Partnership Project.
 PR: EDRS Price - MF01/PC06 Plus Postage.
 PG: 130
 AB: Parents can help judge the quality of school programs. This manual describe* how teams of three parents and an educator rate the quality of special education programs. Instructions and materials are included. (DB)
 LV: 1

AN: ED286704
 AU: Dyson,-Deborah-S.
 TI: Parents' Roles and Responsibilities in Indian Education. Fact Sheet.
 PR: EDRS Price MF01/PC01 Plus Postage.
 PG: 4
 AB: This pamphlet is for American Indian parents. You'll find observations about the importance of Indian culture, getting to know the school people and program, and how to talk to your child's teachers. The pamphlet also explains how Parent Advisory Councils and school boards work, and why it's important to be involved in them. (JHZ)
 LV: 1

AN: ED277634
 AU: Weckstein,-Paul
 TI: Guidelines for Parent Involvement in Chapter 1 Programs.
 PR: EDRS Price MF01/PC01 Plus Postage.
 PG: 20
 AB: This booklet is designed to help make parent involvement

in Chapter 1 programs more effective. It's got a variety of tools for that purpose, including a summary of parental rights, questionnaires, and a draft policy about parental involvement for school districts. (APG)

LV: 1

AN: ED276174

AU: Brynelsen,-Dana, Ed.

TI: Working Together: A Handbook for Parents and Professionals.

PR: EDRS Price - MF01 Plus Postage. PC Not Available from EDRS.

PG: 70

AB: This comprehensive look at the issue of parental involvement includes an historical review for parents of young children with special needs. The second section explains the elements of good practice in parent involvement. The third section offers a variety of resources. (CB)

LV: 2

AN: ED261540

AU: Crespo,-Orestes-I., Comp.; Louque,-Patricia, Comp.

TI: Parent Involvement in the Education of Minority Language Children. A Resource Handbook.

PR: EDRS Price - MF01/PC04 Plus Postage.

PG: 83

AB: Do you know families for whom English is a second language (or on its way to becoming their second language)? If so, maybe this handbook is for you. It gives information about federal bilingual education programs, examples of parent training programs, and resources for bilingual education. (MSE)

LV: 1

AN: ED255039

AU: Criminale,-Ulrike

TI: Launching Foreign Language Programs in Elementary Schools: Highpoints, Headaches and How To's.

PR: EDRS Price - MF01/PC01 Plus Postage.

PG: 6

AB: Are you interested in advocating more foreign language instruction in our schools? Here's a report of the successes

and problems in one extracurricular program. The brochure tells what it takes for a program to thrive. (MSE)

LV: 1

AN: ED250420

TI: Manual for Encouraging Parent-Community Involvement in Bilingual Education and English as a Second Language Programs

PR: EDRS Price - MF01/PC02 Plus Postage.

PG: 44

AB: This handbook contains procedures to set up a structured parent involvement program. The three sections deal with assessing needs; establishing goals, objectives, and activities; and monitoring and evaluating the program. (GC)

LV: 1

AN: ED247425

AU: Valentine,-Thomas

TI: P.L.A.C.E.S. Parents Learning to Assist Children in the Elementary School: A Workshop for Parents. Handbook.

PR: EDRS Price - MF01 Plus Postage. PC Not Available from EDRS.

PG: 72

AB: If you'd like to help other parents understand the influence they have on their children's learning, take a look at this handbook. It's a complete workshop for parents and treats the following topics in 17 activities: introduction to school success, working with your child at home, working with the teacher, and working with the school. The handbook contains three sections, a Participant Manual, a Facilitator's Guide, and an appendix of step-by-step instructions for conducting the workshop. (KC)

LV: 2

AN: ED242388

AU: Frierson,-Felicia; Hills,-Tynette-W.

TI: Planning for Parental Involvement in Early Childhood Education: A Guide for Teachers, Administrators, Parents & Parent Coordinators. Early Childhood Education Resource Guides.

PR: EDRS Price MF01/PC02 Plus Postage.

PG: 30
AB: The focus of this guide is building a parent involvement program that offers parents a variety of options to take part in center or school activities. It includes sample plans to involve parents. Appendices include a parent involvement evaluation questionnaire.(DC)
LV: 1

AN: ED240807
AU: Steinbach,-Trevor-T.
TI: State Gifted Advocacy. A Guide for Parents, Teachers, and Coordinators.
PR: EDRS Price - MF01/PC01 Plus Postage.
PG: 9
AB: Education for very able students is not well-funded in many states. This pamphlet is designed to help parents lobby for state-level funding of gifted programs. (DC)
LV: 1

Selected Resources in Spanish

The ERIC system contains over 700 articles and documents in Spanish. These are a few of the ones developed especially for parents.

AN: ED281966
AU: Cano,-Luis-R.
TI: Helping Your Child Learn: A Parents' Guide +Ayudando a Su Hijo a Aprender: Una Guia para los Padres.
PR: EDRS Price - MF01/PC02 Plus Postage.
PG: 49
AB: Here are ten ways to help your children learn better at school, presented in both English and Spanish. Topics include scheduling study time; talking to the teacher; and tips for working parents. A comic strip and worksheets to help students keep good study habits and achieve goals are included. (KH)
LV: 1

AN: ED277502
TI: Directrices de los Servicios de Salud para Estudiantes Migratorios (Guidelines for Health Services for Migrant

Students).

PR: EDRS Price - MF01 Plus Postage. PC Not Available from EDRS.

PG: 32

AB: This booklet describes, in Spanish, migrant student health programs in California. It includes a list of 72 publications available from the California State Department of Education. (NEC)

LV: 2

AN: ED271231

AU: Crook,-Shirley, Ed.

TI: Lo que da buen resultado en casa. Resultados de la investigación y Actividades de aprendizaje: Sentido común y diversion para niños y adultos (What Works at Home. Research Findings and Learning Activities: Common Sense and Fun for Adults and Children).

PR: EDRS Price - MF01 Plus Postage. PC Not Available from EDRS.

PG: 20

AB: This home learning guide, also available in taped versions, gives parents learning activities to use with their children. Based on the U.S. Department of Education's *What Works*. (HOD)

LV: 2

AN: ED256169

AU: Rodriguez,-Rodolfo, Comp.

TI: Los padres como consejeros o coparticipes en la toma de decisiones. Serie E: Logro de la participación de los padres, cuaderno III. Edición para el estudiante. Cuadernos para el entrenamiento de maestros de educación bilingue. (Parents as Advisors or Participants in Decision Making. Series E: Success with Parent Participation, Book III. Student Edition. Bilingual Education Teacher Training Packet).

PR: EDRS Price - MF01/PC08 Plus Postage.

PG: 184

AB: This learning module concentrates on the role of parents in decision making. Readings and tests are included. The readings concern many topics critical to the participation of minority group parents. The module includes lists of re-

sources, ERIC document abstracts, and selected bibliographies. (MSE)

LV: 1

AN: ED245789

TI: Home Secrets. Lessons for First Grade. The Best of BES—Basic Educational Skills Materials.

PR: EDRS Price - MF01/PC02 Plus Postage.

PG: 45

AB: This is a bilingual packet of 18 activity sheets you can use at home with your first-grader. They focus on colors and shapes, cutting and tracing, word games, stories, writing, health, and math. Each activity lasts 10 or 15 minutes. (RH)

LV: 1

AN: ED242395

AU: Guillen, Mary

TI: Tips for Parents. Un Granito De Arena. Demonstration Reading Program.

PR: EDRS Price - MF01 Plus Postage. PC Not Available from EDRS.

PG: 42

AB: The subject of these booklets, in English and Spanish, is parenting and family relationships. It includes several resources and a bibliography. (RM)

LV: 2

AN: ED238983

TI: Parent to Parent: Insider's Guide for High School Parents + De Padre a Padre: Guía para Padres con Alumnos en la Escuela Superior.

PR: EDRS Price - MF01/PC03 Plus Postage.

PG: 69

AB: This Spanish/English guide was written by parents for parents of high school students. It discusses the practical issues of going to high school in the U.S. The final section concerns employment and college plans. (CMG)

LV: 1

SECTION 2

Twenty-Five ERIC Digests for Parents

ERIC Digests are short reports on topics of prime current interest in education. Digests are targeted specifically for teachers, administrators, policymakers, and other practitioners, but most of them could be very useful to parents, too. These Digests, in particular, were written for or about parents. All of them are available from the ERIC Document Reproduction Service (EDRS). We have listed them in alphabetical order.

Produced by the 16 ERIC clearinghouses, Digests provide an overview of information on a given topic, plus references to items that give more detailed information. They are available from the producing Clearinghouses free, while supplies last. Many are available from the ERIC Document Reproduction Service (EDRS) and on-line from DIALOG. Included with the titles are the ED numbers, in case you wish to order them through EDRS for \$2.00 each.

A Closer Look at Children in Single-Parent Families (1984)
(ED254587)

American Indian Children's Literature: An Update (1984)
(ED259871)

Career Guidance, Families and School Counselors (1986)
(ED279991)

Communicable Diseases in the Schools (1986) (ED282349)

Day Care in Schools (1986) (ED282351)

Developing Individualized Education Programs (IEPs) for the Gifted and Talented (1985) (ED262509)

Elderly Parents and Adult Children as Caregivers (1986)
(ED279993)

Establishing Partnerships Between the Business Community and Rural Schools (1986) (ED287650)

The Family-Career Connection (1986) (ED268305)

**Family Influences on Employment and Education (1986)
(ED272702)**

**Forming a Local Parent Association for Gifted and Talented
Education (1985) (ED262521)**

The Future of Family Life (1982) (ED237801)

**Helping Children Cope with Divorce: The School Counselor's Role
(1986) (ED279992)**

Home Schooling (1986) (ED282348)

The Only Child (1984) (ED256475)

Parents and Schools (1986) (ED269137)

**Parent Involvement in Children's Academic Achievement (1986)
(ED261313)**

Parents of Gifted Children (1985) (ED262527)

**Parent Involvement and the Education of Limited-English-Profi-
cient Students (1986) (ED279205)**

**Parent Participation and the Achievement of Disadvantaged
Students (1985) (ED259040)**

Parents' Rights and Responsibilities (1984) (ED262499)

**Parents' Role in Transition for Handicapped Youth (1987)
(ED282093)**

**Parents' Roles and Responsibilities in Indian Education (1983)
(ED286704)**

**Resources for Involving Parents in Literacy Development (1984)
(ED250673)**

**Teacher, Principal, and Parent Involvement: The Effective School
Movement (1987)**

SECTION 3

How To Order ERIC Documents

There are several ways to order copies of documents you have found described in the ERIC database. Which way you choose will depend on how far you have to travel to get to an ERIC microfiche collection, and how quickly you must have the documents you have chosen. It also depends on whether you have chosen journal articles (they have accession numbers¹ beginning with "EJ") or other types of documents such as research reports, booklets, brochures, conference proceedings, and so forth (they all have accession numbers beginning with "ED").

Articles

Journal articles must be ordered through your local library, directly from the journal itself, or from University Microfilm, International (UMI). Usually, libraries can locate an article and make a copy for you through their interlibrary loan system. There is usually a charge of about ten cents per page. UMI currently charges \$12 for an article, regardless of length. Call or write:

UMI Article Clearinghouse
300 North Zeeb Road
Ann Arbor, Michigan 48106

UMI's toll-free number is 800/732-0616. Be sure to use the EJ accession number when you place your order.

Documents

Documents can be obtained (1) by contacting the organization that originally submitted the document, (2) by going to a university or other institution that has an ERIC microfiche collection and making a copy yourself from the microfiche, or (3) by filling out the order form

¹The accession number is located at the very beginning of an ERIC description (or resume) and looks something like the following: AN: ED254324, or AN: EJ208137.

enclosed in this Guide and ordering your document(s) through the mail from the ERIC Document Reproduction Service (EDRS).

Ordering From the Original Publisher

On each ERIC resume, down toward the bottom, there is a field called "LV:"—this is an abbreviation for "level." Most ERIC documents are Level 1, which means you can order either microfiche or paper copies from EDRS. However, a few documents are Level 2 (and are available in microfiche copies only) and some are Level 3 (available only from the original publisher). **Be sure to check the "LV" number before you order—it will save you trouble.**

Traveling to an ERIC Microfiche Collection

There are hundreds of ERIC microfiche collections located in university libraries, state departments of education, and other education organizations around the country. If you live in a major city there is probably more than one collection in your area. If you live in a nonurban area, there may be a collection nearer to you than you think. We have listed all of the complete ERIC microfiche collections in the country along with their cities, states, and telephone numbers, in Section 9 of the *Guide*, titled "Directory of Complete ERIC Collections." The advantage of going to an ERIC Microfiche Collection is that you can get the documents you need on the spot, and you can usually get journal articles as well.

Ordering Copies Through the Mail

The ERIC Document Reproduction Service (EDRS) can supply you with paper or microfiche copies of documents you select. The charge for paper copies at the time of this writing is \$2.00 for documents up to 25 pages in length and \$2.00 for each additional unit of 25 pages or less (plus shipping, and, for Virginia residents, sales tax). The length of a document you wish to order is indicated in the field on the resume labeled "PG". Use the order form enclosed with this *Guide*, or contact EDRS by writing or calling them at:

ERIC/EDRS
3900 Wheeler Avenue
Alexandria, Virginia 22304-6409
Toll-free telephone number: 1/800/227-3742

It normally takes five working days for EDRS to process your order,

plus UPS shipping time. By the time this *Guide* is published, however, EDRS will also offer a low-cost Fax service (transmission of paper copies over phone lines). Call EDRS for details.

Computing the EDRS Price

Here's a brief quiz to help you calculate the EDRS paper-copy price. **Remember: you're ordering paper copies.**

Suppose the price fields give the following information. What would the price of a paper copy be in each case?

1. "EDRS Price - MF01/PC02 plus postage."

- ☐ \$2.00
- ☐ \$4.00 plus postage
- ☐ \$1.70
- ☐ \$2.00 plus postage

2. "EDRS Price - MF01/PC03."

- ☐ \$4.00 plus postage
- ☐ \$4.00
- ☐ \$6.00 plus postage
- ☐ \$2.55 plus postage

The answers and calculations are printed upside down at the bottom of the page.

1. paper copy price per 25 page unit = \$2.00 plus postage PC02 means multiply \$2.00 by 2, and add postage.
Answer: $2 \times \$2.00 = \4.00 plus postage
2. Answer: $3 \times \$2.00 = \6.00 plus postage
In the last example, please note that the third 25 page unit would probably contain fewer than 25 pages. For example, ED237500, described on page 14 in section 1, contains 59 pages. It is priced, however, in three 25-page units (EDRS Price - MF01/PC03). The third unit, therefore, contains only 9 pages.

SECTION 4

Directory of ERIC Clearinghouses

There are sixteen organizations in the ERIC system called clearinghouses. They build the ERIC database by gathering and describing articles and documents. Each clearinghouse specializes in a particular segment of education literature called its "scope." Clearinghouses also answer questions from database users and publish summaries and syntheses, besides continuing to build the database. ("Synthesis" means "putting together." ERIC Digests put together, or synthesize, findings from various studies and reports in one place.) Clearinghouses are located in different cities around the nation, and they are hosted by a variety of organizations.

The clearinghouses share the mission of serving all who have an interest in education and schooling. Any of them will be glad to receive your call. Many of your questions could be answered by staff at any clearinghouse. Don't feel that you need to call "exactly the right clearinghouse." Staff at every clearinghouse deal with a very wide variety of inquiries.

1. ERIC Clearinghouse on Adult, Career, and Vocational Education (CE)
Ohio State University
Center on Education and Training for Employment
1960 Kenny Road
Columbus, Ohio 43210-1090
Telephone: 614/486-3655; 800/848-4815

Scope: All levels and settings of adult and continuing, career, and vocational/technical education. Adult education, from basic literacy training through professional skill upgrading. Career education, including career awareness, career decision making, career development, career change, and experience-based education. Vocational and technical education, including new subprofessional fields, industrial arts, corrections education, employment and training programs, youth employment, work experience programs, education/business partnerships, entrepreneurship, adult retraining, and vocational rehabilitation for the handicapped.

2. **ERIC Clearinghouse on Counseling and Personnel Services (CG)**
University of Michigan
School of Education, Room 2108
610 East University Street
Ann Arbor, Michigan 48109-1259
Telephone: 313/764-9492

Scope: Preparation, practice, and supervision of counselors at all educational levels and in all settings; theoretical development of counseling and guidance; personnel procedures such as testing and interviewing and the analysis and dissemination of the resultant information; group work and case work; nature of pupil, student, and adult characteristics; personnel workers and their relation to career planning, family consultations, and student orientation activities.

3. **ERIC Clearinghouse on Educational Management (EA)**
University of Oregon
1787 Agate Street
Eugene, Oregon 97403-5207
Telephone: 503/686-5043

Scope: The leadership, management, and structure of public and private educational organizations; practice and theory of administration; pre-service and in-service preparation of administrators; tasks and processes of administration; methods and varieties of organization and organizational change; and the social context of educational organizations. Sites, buildings, and equipment for education; planning, financing, constructing, renovating, equipping, maintaining, operating, insuring, utilizing, and evaluating educational facilities.

4. **ERIC Clearinghouse on Elementary and Early Childhood Education (PS)**
University of Illinois
College of Education
805 W. Pennsylvania Avenue
Urbana, Illinois 61801-4897
Telephone: 217/333-1386

Scope: The physical, cognitive, social, educational, and cultural development of children from birth through early adolescence; prenatal factors; parental behavior factors; learning theory research and practice related to the development of young children, including the preparation of teachers for this educational level; educational pro-

grams and community services for children; and theoretical and philosophical issues pertaining to children's development and education.

5. ERIC Clearinghouse on Handicapped and Gifted Children (EC)
Council for Exceptional Children
1920 Association Drive
Reston, Virginia 22091-1589
Telephone: 703/620-3660

Scope: All aspects of the education and development of the handicapped and gifted, including prevention, identification and assessment, intervention, and enrichment, both in special settings and within the mainstream.

6. ERIC Clearinghouse on Higher Education (HE)
George Washington University
One Dupont Circle, NW - Suite 630
Washington, DC 20036-1183
Telephone: 202/296-2597

Scope: Topics relating to college and university conditions, problems, programs, and students. Curricular and instructional programs, and institutional research at the college or university level. Federal programs, professional education (medicine, law, etc.), professional continuing education, collegiate computer-assisted learning and management, graduate education, university extension programs, teaching-learning, legal issues and legislation, planning, governance, finance, evaluation, interinstitutional arrangements, management of institutions of higher education, and business or industry educational programs leading to a degree.

7. ERIC Clearinghouse on Information Resources (IR)
Syracuse University
School of Education
Huntington Hall, Room 030
150 Marshall Street
Syracuse, New York 13244-2340
Telephone: 315/443-3640

Scope: Educational technology and library and information science at all levels. Instructional design, development, and evaluation are the emphases within educational technology, along with the media of educational communication: computers and microcomputers.

ters, telecommunication s(cable, broadcast, satellite), audio and video recordings, film and other audiovisual materials, as they pertain to teaching and learning. Within library and information science the focus is on the operation and management of information services for education-related organizations. All aspects of information technology related to education are considered within the scope.

8. ERIC Clearinghouse for Junior Colleges (JC)
University of California at Los Angeles (UCLA)
Mathematical Sciences Building, Room 8118
405 Hilgard Avenue
Los Angeles, California 90024-1564
Telephone: 213/825-3931

Scope: Development, administration, and evaluation of two-year public and private community and junior colleges, technical institutes, and two-year branch university campuses. Two-year college students, faculty, staff, curricula, programs, support services, libraries, and community services. Linkages between two-year colleges and business/industrial organizations. Articulation of two-year colleges with secondary and four-year postsecondary institutions.

9. ERIC Clearinghouse on Languages and Linguistics (FL)
Center for Applied Linguistics
1118 22nd Street, NW
Washington, DC 20037-0037
Telephone: 202/429-9551

Scope: Languages and language sciences; theoretical and applied linguistics; all areas of foreign language, second language, and linguistics instruction, pedagogy, or methodology; psycholinguistics and the psychology of language learning; cultural and intercultural context of languages; application of linguistics in language teaching; bilingualism and bilingual education; sociolinguistics; study abroad and international exchanges; teacher training and qualifications specific to the teaching of foreign languages and second languages; commonly and uncommonly taught languages, including English as a second language; related curriculum developments and problems.

10. ERIC Clearinghouse on Reading and Communication Skills (CS)
Indiana University, Smith Research Center
2805 East 10th Street - Suite 150
Bloomington, Indiana 47405-2373
Telephone: 812/335-5847

Scope: Reading, English, and communication skills (verbal and nonverbal) preschool through college; educational research and instruction development in reading, writing, speaking, and listening; identification, diagnosis, and remediation of reading problems; speech communication (including forensics), mass communication, interpersonal and small group interaction, interpretation, rhetorical and communication theory, speech sciences, and theater. Preparation of instructional staff and related personnel in these areas. All aspects of reading behavior with emphasis on physiology, psychology, sociology, and teaching; instructional materials, curricula, test/measurement, and methodology at all levels of reading; the role of libraries and other agencies in fostering and guiding reading; diagnostics and remedial reading services in schools and clinical settings. Preparation of reading teachers and specialists.

11. ERIC Clearinghouse on Rural Education and Small Schools (RC)
Appalachia Educational Laboratory
1031 Quarrier Street
P. O. Box 1348
Charleston, West Virginia 25325-1348
Telephone: 304/347-0400; 800/624-9120

Scope: Economic, cultural, social, or other factors related to educational programs and practices for rural residents; American Indians/Alaska Natives, Mexican Americans, and migrants; educational practices and programs in all small schools; outdoor education.

12. ERIC Clearinghouse for Science, Mathematics, and Environmental Education (SE)
Ohio State University
1206 Chambers Road, Room 310
Columbus, Ohio 43212-1792
Telephone: 614/292-6717

Scope: Science, mathematics, and environmental education at all levels, and within these three broad subject areas, the following topics; development of curriculum and instructional materials; teachers and teacher education; learning theory/outcomes (including the impact of parameters such as interest level, intelligence, values, and concept development upon learning in these fields); educational programs; research and evaluative studies; media applications; computer applications.

13. ERIC Clearinghouse for Social Studies/Social Science
Education (SO)
Indiana University
Social Studies Development Center
2805 East 10th Street - Suite 120
Bloomington, Indiana 47405-2373
Telephone: 812/335-3838

Scope: All levels of social studies and social science education; content of the social science disciplines; applications of theory and research to social science education; contributions of social science disciplines (anthropology, economics, geography, history, sociology, social psychology, political science); education as a social science; comparative education (K-12); content and curriculum materials on "social" topics such as law-related education, ethnic studies, bias and discrimination, aging, adoption, women's equity, and sex education.

14. ERIC Clearinghouse on Teacher Education (SP)
American Association of Colleges for Teacher Education
One Dupont Circle, NW - Suite 610
Washington, DC 20036-2412
Telephone: 202/293-2450

Scope: School personnel at all levels; teacher selection and training, pre-service and in-service preparation, and retirement; the theory, philosophy, and practice of teaching; curricula and general education not specifically covered by other clearinghouses; all aspects of physical education, health education, and recreation education.

15. ERIC Clearinghouse on Tests, Measurement, and
Evaluation (TM)
American Institutes for Research (AIR)
333 K Street, NW - Suite 200
Washington, DC 20007
Telephone: 202/342-5060

Scope: Tests and other measurement devices; methodology of measurement and evaluation; application of tests, measurement, or evaluation in educational projects or programs; research design and methodology in the area of testing and measurement/evaluation; learning theory in general.

16. ERIC Clearinghouse on Urban Education (UD)
Teachers College, Columbia University
Institute for Urban and Minority Education
Main Hall, Room 300, Box 40
525 W. 120th Street
New York, New York 10027-9998
Telephone: 212/678-3433

Scope: Programs and practices in public, parochial, and private schools in urban areas and the education of particular racial/ethnic minority children and youth in various settings—local, national, and international; the theory and practice of educational equity; urban and minority experiences; and urban and minority social institutions and services.

SECTION 5

The Range of Information About Parents in the ERIC Database

In Section 1 we have included brief descriptions of 55 documents and articles written especially for parents, but we noted that these were only a small sample of documents and articles that might be of interest to you. This section is meant to give you an idea of just how much more the ERIC database has to offer **with respect to parents**. But consider this fact: **Many other topics** are represented in ERIC by a similarly rich array of information.

One measure of the scope of information about parents in the ERIC database is to count how many descriptions of articles and documents contain the word "parents." It would be mildly interesting to know that figure, but how long would it take to sort out only those descriptions that contain the word "parents"? How can we possibly know?

New techniques and equipment make what would otherwise be an impossible and foolish chore both possible and easy, and, hence, useful to illustrate our point. Using this new technology, it took about 15 seconds to identify 23,364 descriptions that contain the word "parents."

That many articles and documents probably represents more reading than any expert on the topic would undertake in a lifetime. Among all those resources, how does one find **particular** information, say, about parenting skills that help adolescents deal with their friends? The special techniques and equipment that make it possible and relatively easy to pinpoint the **particular** information you seek are considered in subsequent sections of this *Guide* devoted to ERIC tools and searching techniques.

For now, just consider the range of topics represented by this many resources about parents. The list that follows shows how many descriptions of articles or documents contain the given terms that relate explicitly to parents. This list, however, is drawn only from the 127,861 articles and documents added to the database from the beginning of January 1983 to the end of June 1988. We included terms in this list only if they were used in at least ten articles and documents, so the following list is a conservative estimate. Terms that are followed by a hyphen and nothing else are combining terms; that is, they may appear in combination with a number of other words. Also note that the term "parents," which we looked for in all 750,000 descriptions, is just *one* term among the following **forty-two** terms:

Term	Number of Articles or Documents
1. parent	8777
2. parent-adolescent	22
3. parent-advisory-councils	10
4. parent-as-a-teacher	28
5. parent-aspiration	51
6. parent-associations	76
7. parent-attitudes	1308
8. parent-background	106
9. parent-behavior	36
10. parent-child	250
11. parent-child-relationship	2075
12. parent-conferences	13
13. parent-counseling	91
14. parent-education	678
15. parent-financial-contribution	91
16. parent-grievances	11
17. parent-infant	28
18. parent-influence	605
19. parent-materials	215
20. parent-participation	1596
21. parent-professional	19
22. parent-responsibility	212
23. parent-rights	97
24. parent-role	1321
25. parent-school	46
26. parent-school-relationship	960
27. parent-student-relationship	238
28. parent-teacher	117
29. parent-teacher-associations	23
30. parent-teacher-conferences	110
31. parent-teacher-cooperation	367
32. parent-workshops	51
33. parentage	11
34. parental	1789
35. parenthood	571
36. parenthood-	16
37. parenthood-education	137
38. parenting	754
39. parenting-	57
40. parenting-skills	197
41. parents	7813
42. parents-	51

This list suggests how the topic of "parents" is subdivided in the ERIC database. **The same phenomenon is repeated for all the topics of education.** If you start combining terms (for example "parenting-skills and adolescence") you can begin to focus on resources that address a very particular topic of concern to you. Again, the following sections can help you use the ERIC database in this way.

SECTION 6

A Description of the Basic Tools Used With the ERIC Database

There are three basic tools that will help you use the ERIC database:

- (1) a thesaurus,
- (2) two printed indexes, and
- (3) compact disks.

There are other helpful resources (for example on-line searching services), but they will not be considered in much detail here.

The *Thesaurus of ERIC Descriptors*

The originators of the ERIC database knew it would grow, and so they were concerned with how best to organize it. Their concern was well-founded, and so was their solution: the "controlled vocabulary," which is presented in the *Thesaurus of ERIC Descriptors*. The ERIC indexes are based on the vocabulary described in the *Thesaurus*. That vocabulary is the key to using the ERIC database effectively.

The *Thesaurus* resembles a dictionary, but it has three main sections. Each section displays **all the terms** of the controlled vocabulary in different ways, for different purposes.

The first section, "The Alphabetical Descriptor Display," contains detailed information about each descriptor: When it was first used, how often it has been used since then, how it relates to other descriptors, and, when necessary, what it means. All descriptors are listed in alphabetical order in the Alphabetical Display.

Here's a sample entry in the Alphabetical Display (consult the Glossary for a brief description of the abbreviations):

PARENT ATTITUDES

Jul. 1966

CIJE: 1683

RIE: 2399

GC: 510

SN: Attitudes of, not toward, parents (note: prior to apr80, the use of this term was not restricted by a scope note)

UF: Parent Opinions
Parent Reaction (1966 1980)

NT: Father Attitudes

Mother Attitudes
 BT: Attitudes
 RT: Family Attitudes
 Parent Aspiration
 Parent Background
 Parent Counseling
 Parent Grievances
 Parents

The second section of the *Thesaurus* is the "Rotated Display of Descriptors," and it's the **most useful section for new users** of the ERIC database. The Rotated Display lets you determine how a particular common English word (not necessarily a descriptor) is used in the controlled vocabulary. This is important because, as you will see later, translating your topic into the language of the controlled vocabulary is the first step in searching the ERIC database for articles and documents that can answer your questions.

The Rotated Display works this way: there are three columns, and you focus your attention on the **middle column**, which presents an alphabetical list of all words that appear in descriptors. The words in the middle column may be modified (in the first column) by a preceding word or by a following word (in the third column). Here's an example of descriptors that contain the word "ability," with the three columns referred to above labelled "1", "2", and "3":

1	2	3
	Ability	
Academic	Ability	
Cognitive	Ability	
Creative	Ability	
	Ability	Grouping
	Ability	Identification

In using the Rotated Display, remember to scan the **middle column** for the term that interests you. When you find it, then scan the first and third columns together with the middle column. All words that appear in descriptors are listed using the same pattern in the Rotated Display.

The third main section of the *Thesaurus* is the "Two-Way Hierarchical Term Display." It shows how descriptors are related to one another by graphing the **relationship of a descriptor to its narrower and broader terms**. When you want to make sure that the descriptor you are using is sufficiently narrow or broad to represent your interest, use the Hierarchical Display.

In essence, then, the *Thesaurus* displays the structure of ERIC's controlled vocabulary. Its three main sections show how the almost 10,000 descriptors are related to one another. Since the descriptors organize the articles and documents, understanding how to use the *Thesaurus of ERIC Descriptors* is very important, if you intend to search the database yourself.

The Paper Indexes

The paper indexes organize the articles and documents in the ERIC database mostly by descriptors. ERIC journal articles (with their resumes) are indexed in the *Current Index to Journals in Education* (the *CJIE*). The *CJIE* is published in monthly volumes and in cumulative volumes that appear twice yearly.

ERIC documents (with their resumes) are indexed in the Resources in Education index. The *RIE*, too, is published monthly, but its cumulative volumes are published yearly.

In both indexes, there are two main sections: **resumes**, organized by accession numbers (ED numbers and EJ numbers) and **titles**, organized by descriptors.

When you use the paper indexes to find articles and documents, you are conducting a "manual search." Section 7 of the *Guide* describes how to conduct a manual search. With manual searches, you use an index to look under one descriptor at a time, which can be time-consuming. This is a good way to learn to use the ERIC database at first, but once you have done a number of manual searches, you may begin to wonder if there's not a better way. There is!

Compact Disks

Computer searches are faster and more powerful than manual searches. You have several options if you are interested in learning about computer searches, but this *Guide* concentrates on the newest form of ERIC computer searches—using compact disks—because it is the option that is most likely to be within reach of concerned parents in the near future. This technology is already beginning to appear in libraries.

The advantage of computer searching is that it allows you to **combine descriptors in a variety of ways** as you search, a task that you would not even think of doing manually.

For example, imagine searching the resumes of all 750,000 articles and documents in the ERIC database. It would take months. With the compact disk ("CD-ROM," for "compact-disk, ready-only-memory") technology, such a search takes a few minutes at most, even if you were combining descriptors. Section 8 of this *Guide* describes

how to conduct a CD-ROM search.

The tools for this newest form of computer searching are (1) an IBM-compatible microcomputer that operates a (2) compact disk player using (3) two kinds of software. Sounds complicated. Nonetheless, using it is not really too complicated, if you have a little experience with computers.

SECTION 7

Tutorial: Manual Searching

Using this section of the *Guide* requires you to set aside time to read it, time to visit a library, and time to scan articles and documents to locate those that seem most useful. It's the kind of work we expect careful students to do, and so, it's not easy. But it can be very rewarding.

Obviously, this is not a process that will appeal to all parents. Many parents will not have the time, the energy, or the academic skills to use the ERIC system in this way. This tutorial is really intended for those curious parents who are able to take the steps outlined below.

Starting With A Question

Every search starts with a question. For these simulated searches, our question is this: "Is skipping a grade harmful to elementary school children?" It's a rather controversial question, but there is an answer, and the answer is reflected in the ERIC database. The first step in our manual search will be to select and list descriptors under which to look in the paper indexes. Descriptors are terms **related** to the content of the subject being searched. When developing a list of descriptors, identify the major ideas in your question. For the question above, they would probably include "skipping a grade" and "elementary school children," because the question explicitly contains these terms. We need to consider related forms of these terms, and we also need to think of ideas that are only **implied**.

As an example, let's make a list in these two categories (related forms and implied ideas).

Related Forms

- grade-skipping
- elementary programs
- skipping grades

Implied Ideas

- effects
- achievement
- social-emotional development

- program results
- accelerated learning
- gifted children

That's more than enough. If you have trouble coming up with descriptors and need help, call any ERIC clearinghouse and they will be glad to help you. An earlier section of this *Guide* lists the 16 ERIC Clearinghouses and describes the area of education covered by each.

Once you develop such a list, you're ready to use the *Thesaurus of ERIC Descriptors*. Recall that the *Thesaurus* has three sections: the Alphabetical Display, the Rotated Display, and the Hierarchical Display.

The section you'll turn to first is the Rotated Display. It's the three-column display based on words that appear in descriptors. Great, but where do you start? Start simple: take a look at the descriptors that have the word "grade" in them. Maybe "grade-skipping" will be there; if not, maybe there will be something close.

We find (p. 340-341 in the 1987 edition of the *Thesaurus*) that there are 36 descriptors that contain the word "grade" or "grades." "Grade-skipping," however, is not among them.

But are there other terms that might be useful in our search? "Age-grade-placement" looks promising. That's nice, but how promising is it? To find out, turn to the Alphabetical Display. There, you can find out how many times the descriptor has been used in the *RIE* and *CIJE*, and you can check out the related terms, and, possibly, you can read a scope note.

The relevant entry is on page 8 (*Thesaurus*, 1987 ed.). Altogether there are 114 entries in the database (*CIJE* and *RIE*). And the scope note is helpful, since it includes the following phrase: "... the relationship between age and grade level." The related terms are possibly even more helpful. They include "acceleration- (education)," "school-entrance-age," "school-readiness," "student-placement," and "student-promotion."

At this point, you might want to give up on your original list, and check out these related terms in the alphabetical display. If you do, you'll find the following information.

Descriptor	Entries in Database	Scope Note
acceleration (ed.)	76	The process of progressing through an educational program at a rate faster than that of the average student.
school-entrance-age	76	Age of students when they enroll in school.
school-readiness	198	Cognitive, physical, and psychosocial maturity prerequisite to learning in a school setting.
student-placement	2438	Assignment of students to schools or academic classes and programs according to their background, readiness, abilities, and goals.
student-promotion	192	Process by which student is passed to the next higher instruction or grade level.

All of this information is helpful, and we have not even looked at all the terms listed as being related to these descriptors.

To keep it brief, new related terms that appeared under these descriptors are as follows:

- academically-gifted,
- advanced-courses,
- advanced-placement,
- advanced-students,
- early-admission, and
- flexible-pacing.

We've done a lot of preparation now, so at this point we might decide what the most promising terms for our search are.

Let's recall that what we're seeking is information about the

effects of grade-skipping on elementary students. In this light, "academically gifted," "acceleration," "advanced-placement," and "age-grade-placement" look like our best bets for a manual search.

The next step is to decide whether to search both the *CIE* and the *RIE*, or just one of them. Ideally, you would want to review documents from both. However, the need to save time may lead you to work with only one of the two paper indexes. In making this decision you have to balance two considerations.

Quality is the first consideration. Most journal articles are subject to "peer review" prior to publication, and they have a consistency of length and format that *RIE* documents do not. *RIE* documents represent a variety of work—very lengthy research reports, official publications of organizations, instructional materials developed by individuals or associations, and descriptions of programs.

Availability is the second consideration. Many journal articles will **not** be available locally, but must be ordered on interlibrary loan, from the journal itself, or from UMI. Copies are more expensive than *RIE* documents. Documents in the *RIE*, on the other hand, are almost always available in libraries with microfiche collections. You can get copies of most ERIC documents (as opposed to articles) quickly.

As you can see, deciding this question depends on the nature of your situation. If, in your manual search, you choose to search both the *CIE* and the *RIE*, it will take twice as long as searching just one (because you will be consulting two paper indexes, instead of just one). It is definitely a question of balancing pros and cons.

Another question involved in a search is: How far back in time do you want to search? Recall that going back to the beginning (1966) will require searching about 80 volumes. Typically, an efficient practice is to start with the most recent issues of the *CIE* and the *RIE*, and continue searching until you think you have answered your question. Again, this is a matter of judgment.

We've identified four descriptors to search, and for the sake of argument, let's say we are going to search the *RIE* only, back to 1983. If we find enough documents to satisfy our curiosity given that "search strategy," then we'll stop. If not, we'll reexamine our strategy, perhaps changing descriptors, examining the *RIE*, or extending our search time line to earlier years.

Now, we're ready to turn to the latest annual volume of the *RIE*. (If we wanted to be very current we would also check the latest monthly editions of the *RIE* that have been published since the last annual volume.)

The procedure will be to check entries under first one descriptor, then the other in the *RIE Annual Cumulation Index*. We'll scan the titles of all entries. When we see an interesting title, we'll check the

resume in the *Annual Cumulation Abstracts, Parts One and Two*, where the resumes are given in full. If we like what we find, we'll write down the title and the accession number. That will allow us to retrieve the microfiche when we decide that our search is complete.

Under "academically-gifted" in the 1987 *RIE Annual Cumulation Index*, there are 18 entries. At least three documents look like they might be interesting:

ED280222, "The Acceleration into College and Emotional Adjustment of the Academically Gifted Adolescent: A Synthesis and Critique of Recent Literature,"

ED277206, "Some Characteristics of SMPY's '700-800' on SAT-M Before Age 13 Group," and

ED277205, "The Urgent Need for an Academic Focus."

A review of the resumes indicates that, although, none of the documents focuses exclusively on elementary students, two of them (ED280222 and ED277206) explicitly discuss students who complete elementary school early. We would record at least these two titles and ED numbers so we could retrieve the microfiche and make paper copies to read at home.

To complete the manual search, you would repeat this procedure with each descriptor in each annual volume of the *RIE* until you felt you had answered your question. Going back to January 1983 with four descriptors and just the *RIE* annual volumes, you'd go through the routine of scanning, reading abstracts, and recording titles and ED numbers 24 times. How long would that take? Several hours at least. In the end, however, you might have the titles of 20 documents that would help answer your question.

You could write to EDRS for paper copies, or you could make them yourself in the library, using a microfiche reader-printer. It would probably take another hour or two to print out your paper copies of 20 documents, depending on the length of the documents.

SECTION 8

A Brief Introduction to Computer Searching With CD-ROM

A complete course on computer searching with CD-ROM is beyond the scope of this *Guide*. However, here is a list of the prerequisite skills you'll need to get started:

1. minimal typing skills (knowing the keyboard is very helpful).
2. basic computer literacy (for example, ability to identify computer equipment; basic knowledge of computer jargon and software types).
3. some experience operating microcomputers (for example, using on-screen menus, directing output to a printer or to a disk drive).
4. the ability to consult hardware and software manuals to answer questions about software use.
5. the ability to think about search results and search strategies in terms of sets defined by logical operators (the terms, "and," "or," "not" play a special role in computer searching).

If you have these skills, you will find it very easy to move from manual searches to computer searches.

With our CD-ROM search we will start with the same question, and we will use a similar list of relevant common English terms and descriptors. CD-ROM, however, can allow you to do many things that you cannot possibly do in a reasonable amount of time with paper indexes. It's both more powerful and more flexible than searching with the paper tools.

So, before we walk through a simulated search, let's take a look at some of the differences between CD-ROM and manual searching. For our example, we will describe the SilverPlatter CD-ROM system. The general features of the other systems that you may encounter are similar.

Like the *Thesaurus of ERIC Descriptors*, CD-ROM, too, has a list of terms under which it is possible to search. This list, however, is much longer than the list of 10,000 descriptors. Basically, the CD-

ROM index includes every meaningful word used in all the resumes in the ERIC database. You can look for articles and documents under any meaningful word. The advantage of using descriptors, however, is that **descriptors** have been used more consistently than common English words. Also, because descriptors are **indexing** terms, they relate more meaningfully to the article or document than do common English words.

The *RIE* and the *CIJE* are based on annual and semiannual volumes. If you are doing a manual search, that format causes you to have to repeat your search for every year (in the case of the *RIE*) and for every six-month period (in the case of the *CIJE*). Compact disks, however, contain the entire database, at present, on two or three disks.

Hence, to cover the complete database (back to 1966), you need to repeat your search routines a maximum of three times. If you restricted your search to the years 1983-the present, you would not need to repeat your search routine at all!

In our manual search, we chose what seemed to us like the four best descriptors, and then we searched each of them in each annual edition of the *RIE* back to 1983. Working this way, we had to "keep our eyes open" for articles and documents that seemed to deal with the effects of advanced placements (or grade-skipping, or acceleration, etc.) on elementary students.

In CD-ROM searching it is possible to **combine** two, three, or more terms in doing a search. Terms are connected with the combining words "and," "or," and "not." The technical term for these combining words is "logical operators." Here's how they work:

1. When you search under a particular term, for example, "advanced placement," you identify a **set** of resumes. If you search under another term, for example, "elementary-school-students" you identify another **set** of resumes.
2. If the terms are related, the sets will overlap to some degree. That is, each set may contain some resumes that appear in the other set.
3. With CD-ROM, you can use that relationship to help you search the database. To use the same strategy with a manual search would take weeks. With CD-ROM it takes seconds.
4. CD-ROM searching clarifies the relationship of the sets for you, with the **logical operators** "and," "or," and "not."

The following is a brief review of the three logical operators. Let's take "and" first. Suppose one set of ERIC resumes relates to acceleration-education, and another set relates to elementary-education. If you ask the computer to search the CD-ROM for "acceleration-education **and** elementary-education," your search will yield **just those resumes that belong to both sets.**

Here's a picture of the situation in this case:

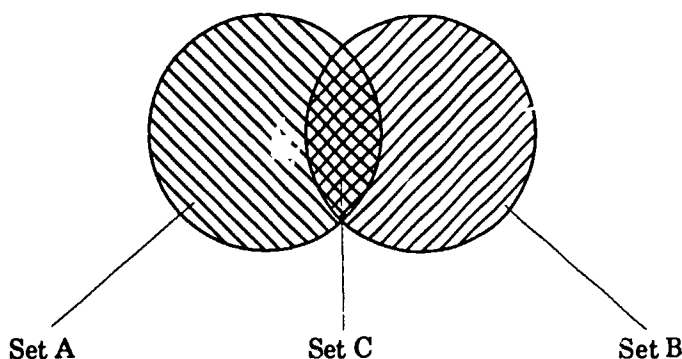


Figure 1

Elementary-education **and** Acceleration-education

Set A = elementary education	11,929 resumes
Set B = acceleration-education	143 resumes
Set C = elementary- education and acceleration-education	17 resumes

(January 1983-September 1988)

Keep in mind that these two sets happen to overlap; but two sets don't **necessarily** have to overlap. When they don't, you need to adjust your search strategy, using different descriptors or other techniques. Many times in running a CD-ROM search you will find that there is no overlap. Adjust your terms when this happens. CD-ROM searching is more flexible than manual searching, but it requires that you be more flexible, too!

For example, if you combined the descriptors "advanced-

placement" and "elementary-school-students," there would be no overlap. Figure 2 shows this case.

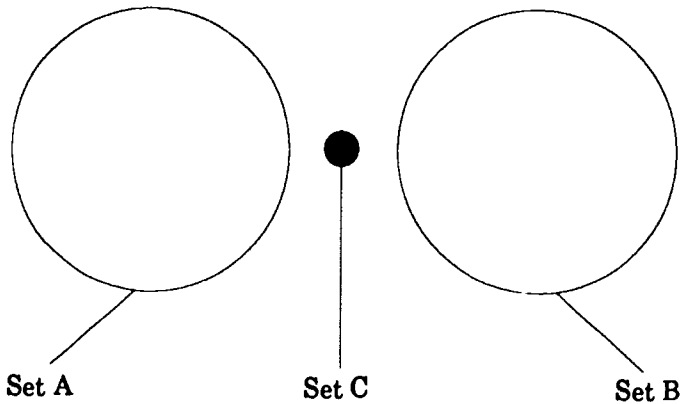


Figure 2

Advanced-placement and Elementary-school-students

Set A = advanced-placement	71 resumes
Set B = elementary-school-students	1,724 resumes
Set C = advanced-placement and elementary- school-students	0 resumes (it doesn't exist)

(January 1983-September 1988)

This situation is known as a "null result" or a "null set". It means that, although you've defined a set, it doesn't have any articles or documents in it.

Now let's look at the "or" logical operator. Again, our example is based on the two sets considered in Figure 1 (elementary-education, acceleration-education). If you ask the computer to search the CD-ROM for "elementary-education" **or** "acceleration-education," your search will yield just those resumes related to one or the other descriptor. Figure 3 shows how this works.

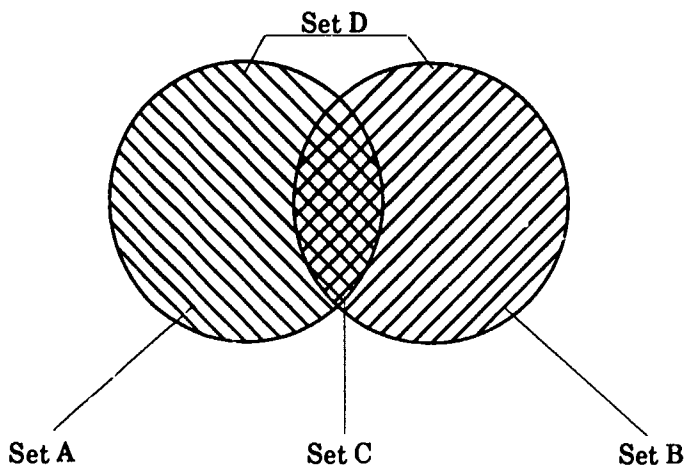


Figure 3

Elementary-education or Acceleration-education

Set A = elementary-education	11,929 resumes
Set B = acceleration- education	143 resumes
Set C = 17 resumes that appear in both Sets A and B	
Set D = elementary-education or acceleration-education	(11,929 + 143 - 17) resumes 12,055 resumes

(January 1983-September 1988)

Now let's consider the "not" logical operator. We'll use the same descriptors, but this time the picture is rather different. The command to search for "acceleration-education" **not** "elementary-education" tells the computer to find all the advanced placement articles, but **not** to report any that contain the phrase "elementary-education." That is, in this case the logical operator defines one set (elementary-education) as a **subset** of a larger set (advanced-placement). Here's the picture:

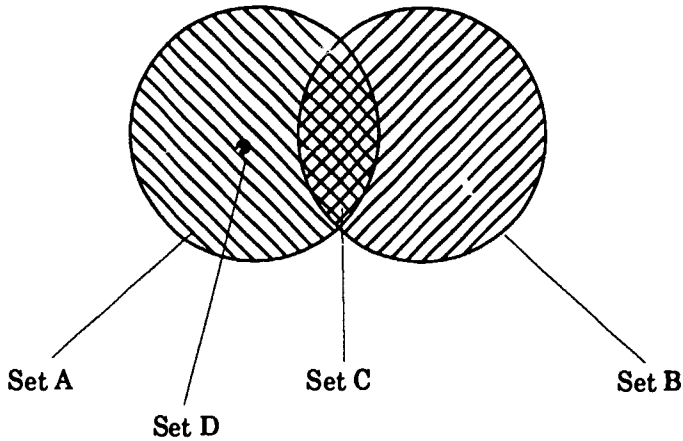


Figure 4

Acceleration-education not Elementary-education

Set A = acceleration-education	143 resumes
Set B = elementary-education	11,929 resumes
Set C = 17 resumes that appear in both Set A and Set B	143 - 17 resumes
Set D = acceleration-education not elementary-education	126 resumes

(January 1983-September 1988)

If we reversed the search command to read "elementary-education" not "acceleration-education" we'd get this picture:

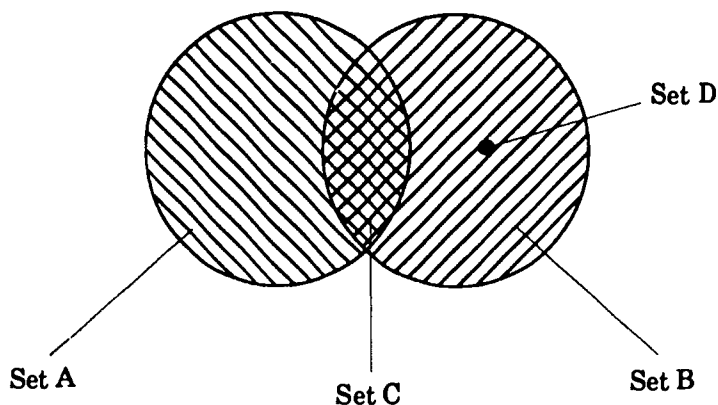


Figure 5

Elementary-education not Acceleration- education

Set A = acceleration-education	143 resumes
Set B = elementary-education	11,929 resumes
Set C = 17 resumes that appear in both Set A and Set B	
Set D = elementary-education not acceleration-education	11,929 - 17 resumes 11,912 resumes

(January 1983-September 1988)

Using logical operators, you can retrieve very specific results over a wide range of topics very quickly. That's the flexibility and power of coordinated searching. Are you beginning to see how coordinated searching works? If you focus on the way those sets are defined, and keep the above diagrams in mind, it will help.

To get the feel for how well this works in practice, you need to visit a library that makes CD-ROM searching available to its clients. Remember that it takes a little while to discover all the ins and outs of computer searching. Take this *Guide* along to consult as needed. And don't be afraid to ask the librarian for a demonstration. That's what librarians are there for!

SECTION 9

Directory of Complete ERIC Collections

The complete ERIC collection can be found at the locations described on the following pages.

The collections listed below consist of the following resources:

- *Resources in Education (RIE)*, 1966- present;
- *Current Index to Journals in Education*, 1969- present;
- the current *Thesaurus of ERIC Descriptors*; and
- a complete *RIE* microfiche collection, 1966-present.

Consult the *Directory of ERIC Information Service* for other ERIC collections in your region.

Alabama

University of Alabama	Birmingham	205/934-6364
	University	205/348-6055
University of Montevallo	Montevallo	205/665-6502
Troy State University	Troy	205/566-3000, x256, x257

Alaska

University of Alaska	Fairbanks	907/479-7206
	Juneau	907/789-4467

Arizona

Arizona State University	Tempe	602/965-6392
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Arkansas

Ouachita Baptist University	Arkadelphia	501/246-4531, x120
University of Arkansas	Fayetteville	501/565-4101
Arkansas State University	Jonesboro	501/972-3077 or 3078
University of Arkansas	Little Rock	501/569-3120

California

Humbolt State University	Arcata	707/826-3416
California State College	Bakersfield	805/833-5342 or 2151
Information on Demand, Inc.	Berkeley	415/644-4500

University of California	Berkeley	415/642-4208 or 2475
	Irvine	714/856-6155
	Los Angeles	213/825-1435
	San Diego	619/452-3336
California State University	Chico	916/895-5833
	Northridge	818/885-2285
	Sacramento	916/454-6775
Claremont Colleges	Claremont	714/621-8000, x3861
Contra Costa County Office of Education	Concord	415/671-4318
California State University	Fresno	209/294-2174
	Hayward	415/881-3780
California State Library	Sacramento	916/322-4572
San Diego County Office of Education	San Diego	619/292-3556 or 3557
San Diego State University	San Diego	619/265-6724
San Jose State University	San Jose	408/277-3886
California Polytechnic State University	San Luis Obispo	805/546-2273
University of the Pacific	Stockton	209/946-2431
University of Southern CA	Los Angeles	213/743-6249 or 2869
San Mateo Educational Resources Center	Redwood City	415/363-5449
University of San Francisco	San Francisco	415/666-6686
Colorado		
University of Colorado	Boulder	303/492-7521, 8705 or 6930
Colorado State University	Fort Collins	303/491-1881
University of Northern Colorado	Greeley	303/351-2562 or 2264
Western State College of Colorado	Gunnison	303/943-2053 or 2860
Connecticut		
Southern Connecticut State U.	New Haven	203/397-4500
University of Bridgeport	Bridgeport	203/576-4752
Delaware (most complete collection in state)		
Delaware State College	Dover	302/736-5111 or 5112

DIRECTORY OF COMPLETE ERIC COLLECTIONS

District of Columbia

American University	Washington	202/885-3238
Catholic University of America	Washington	202/635-5070
District of Columbia Public Schools	Washington	202/724-3680 or 3684
Gallaudet College	Washington	202/651-5574
Howard University	Washington	202/636-7252
Library of Congress	Washington	202/287-5639
U.S. Department of Education	Washington	202/254-5060

Florida

Florida Atlantic University	Boca Raton	305/393-3776
Duval County School Board	Jacksonville	904/390-2191, 2192 or 2193
University of North Florida	Jacksonville	904/646-2616
Marion County Schools	Ocala	904/732-8041, x290
University of West Florida	Pensacola	804/474-2439
University of South Florida	Tampa	813/974-2729

Georgia

Georgia Southwestern College	Americus	912/928-1352
Georgia Department of Educ.	Atlanta	404/656-2402
Georgia State University	Atlanta	404/658-2172
Columbus College	Columbus	404/568-2042
North Georgia College	Dahlonega	404/864-3391, x226, x294
Georgia College	Milledgeville	912/453-4047 or 5573
Georgia Southern College	Statesboro	912/681-5645

Guam (most complete collection in territory)

University of Guam	Mangilao	671/734-2482
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Hawaii (most complete collection in state)

Brigham Young University	Laie	808/293-3884
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Idaho

Boise State University	Boise	208/385-3581 or 1270
University of Idaho	Moscow	208/885-6344
Idaho State University	Pocatello	208/236-2940

Illinois

Southern Illinois University	Carbondale	618/453-2274
Eastern Illinois University	Charleston	217/581-6094
Western Illinois University	Macomb	309/298-2411, x263, x264, x230
Illinois State University	Normal	309/438-5448
University of Illinois	Urbana	217/333-2305
Chicago State University	Chicago	312/995-2235
Northeastern Illinois University	Chicago	312/583-4050, x8197
University of Chicago	Chicago	312/962-8444
Northwestern University	Evanston	312/491-7656

Indiana

Indiana University	Bloomington	812/335-1798
Purdue University	Hammond	219/844-0520, x225
Ball State	Muncie	317/285-5277
Indiana State University	Terre Haute	812/237-2580

Iowa

Iowa State University	Ames	515/294-3642
University of Northern Iowa	Cedar Falls	319/273-2838
Iowa Dept. of Public Instruction	Des Moines	515/281-5286
American College Testing Program	Iowa City	319/337-1165 or 1166
University of Iowa	Iowa City	319/353-4056

Kansas

Emporia State University	Emporia	316/343-1200, x205
Kansas State University	Manhattan	913/523-6516

Kentucky

University of Louisville	Louisville	502/588-6747
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Louisiana

Louisiana State University	Baton Rouge	504/388-8875
McNeese State University	Lake Charles	318/437-5741
Northeast Louisiana University	Monroe	318/342-2194
University of New Orleans	New Orleans	504/286-6550
Nicholls State University	Thibodaux	504/446-8111, x391

Maine

University of Maine at Orono	Orono	207/581-1673
University of Southern Maine	Gorham	207/780-4269 or 4279

Maryland

Coppin State College	Baltimore	301/383-5926
University of Maryland	Catonsville	301/455-2234
	College Park	301/454-5704
Salisbury State College	Salisbury	301/543-6130

Massachusetts (excludes Boston metropolitan area)

Bridgewater State College	Bridgewater	617/697-1304 or 1394
Fitchburg State College	Fitchburg	617/345-2151, x3230
Framingham State College	Framingham	617/345-2151, x271, x272
Salem State College	Salem	617/745-0556, x2612, x2613
Springfield College	Springfield	413/788-3315 or 3307
University of Lowell	Lowell	617/452-5000, x2485
University of Massachusetts	Amherst	413/545-0150

Michigan

University of Michigan	Ann Arbor	313/764-2389
Andrews University	Berrien Springs	616/471-3272
Wayne State University	Detroit	313/577-4040
Michigan State University	East Lansing	517/355-6669
Western Michigan University	Kalamazoo	616/383-1666
Library of Michigan	Lansing	517/373-1593
Central Michigan University	Mt. Pleasant	517/774-3244
Oakland Schools Educational Resource Center	Pontiac	313/858-1960 or 1962
Wayne County Intermediate School District	Wayne	313/467-1440
Eastern Michigan University	Ypsilanti	313/487-2142

Minnesota

Mankato State University	Mankato	507/389-5953
University of Minnesota	Minneapolis	612/376-4100
Moorhead State University	Moorhead	218/236-2922

Minnesota (cont'd)

Saint Cloud State University	St. Cloud	612/255-2084
Minnesota State Department of Education	St. Paul	612/296-6684

Mississippi

Mississippi State University	Mississippi State	601/325-3060
University of Mississippi	University	601/232-5855

Missouri

University of Missouri:	Columbia	314/882-8326 or 4581
	Kansas City	816/276-1534
	St. Louis	314/553-5188
Missouri Southern State College	Joplin	417/625-9386
Northeast Missouri State University	Kirksville	816/785-4534
St. Louis Board of Education	St. Louis	314/865-4500, x203
Washington University	St. Louis	314/889-5410
Central Missouri State University	Warrensburg	816/429-4151

Montana

Eastern Montana College	Billings	406/657-1654, 1656 or 1665
Montana State University	Bozeman	406/994-3171

Nebraska

University of Nebraska	Omaha	402/554-2361
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Nevada

University of Nevada	Las Vegas	702/739-3512
	Reno	702/784-6568, 6508 or 6566

New Hampshire

Dartmouth College	Hanover	603/646-2560
Plymouth State College	Plymouth	603/536-1550, x257, x455
University of New Hampshire	Durham	603/862-1540

New Jersey

Jersey City State College	Jersey City	201/547-3017
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DIRECTORY OF COMPLETE ERIC COLLECTIONS

New Jersey (cont'd)

Rider College	Lawrenceville	609/896-5115
Rutgers University	New Brunswick	201/932-7526 or 7509
New Jersey Vocational Education Resource Center	Old Bridge	201/390-1191
Seton Hall University	South Orange	201/731-9432 or 9434
William Paterson College of NJ	Wayne	201/595-2161
	Portland	207/780-5347

New Mexico

University of New Mexico	Albuquerque	505/277-5761
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New York

New York Education Dept.	Albany	518/474-3639
New York State Library	Albany	518/474-3232
State University of New York	Albany	518/442-3558 or 3609
	Buffalo	716/878-6313
	Cortland	607/753-2525
	Fredonia	716/673-3183
	New Paltz	914/257-2212
	Oswego	315/341-4267
	Plattsburgh	518/564-3180
	Potsdam	315/267-2487
	Stony Brook	516/246-5977
Syracuse University	Syracuse	315/423-2438
University of Rochester	Rochester	716/275-4481
Queens College	Flushing	718/520-7252
Adelphi University	Garden City	516/663-1032
Long Island University	Greenvale	516/299-2142 or 2842
City University of New York	New York	212/772-4140 or 4141
	Staten Island	718/380-7824
Columbia University	New York	212/678-3494
Fordham University	New York	212/841-5130
New York University	New York	212/598-7515

North Carolina

Appalachian State University	Boone	704/262-2186
University of North Carolina	Chapel Hill	919/962-2094 or 1151

North Carolina (cont'd)

	Charlotte	704/597-2243
	Greensboro	919/379-5251 or 5419
	Wilmington	919/395-3760
Western Carolina University	Cullowhee	704/227-7485 or 7274
East Carolina University	Greenville	919/757-6677
State Department of Public Instruction	Raleigh	919/733-7904

North Dakota (only collection in state)

University of North Dakota	Grand Forks	701/777-4647
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Ohio

University of Akron	Akron	216/375-7234
Ohio University	Athens	614/594-5240
Bowling Green State U.	Bowling Green	419/372-2362
Cleveland State University	Cleveland	216/687-2374
Ohio State University	Columbus	614/422-6275
State Library of Ohio	Columbus	614/462-7061
Wright State University	Dayton	513/873-2925
Kent State University	Kent	216/672-3045
Miami University	Oxford	513/529-4141
University of Toledo	Toledo	419/537-2843
Youngstown State University	Youngstown	216/742-3684

Oklahoma

Oklahoma State University	Stillwater	405/624-6542
Northeastern Oklahoma State University	Tahlequah	918/456-5511, x3260
University of Tulsa	Tulsa	918/592-6000, x2352

Oregon

Southern Oregon State College	Ashland	503/482-6445
University of Oregon	Eugene	503/686-3053
Western Oregon State College	Monmouth	503/838-1220, x240
Portland State University	Portland	503/229-3684
Oregon Department of Ed.	Salem	503/378-8471

Pennsylvania

California University of PA	California	412/938-4091
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Pennsylvania (cont'd)

Clarion University of PA	Clarion	814/226-2301 or 2304
East Stroudsburg University	East Stroudsburg	717/424-3594
Indiana University of PA	Indiana	412/357-2349
Kutztown University	Kutztown	215/683-4480
Pennsylvania State University	Middletown	717/948-6073
Millersville University of PA	Millersville	717/872-3611
University of Pittsburgh	Pittsburgh	412/624-4434 or 4528
Slippery Rock University	Slippery Rock	412/794-7243
Pennsylvania State University	University Park	814/863-0377
King's College	Wilkes-Barre	717/826-5900
Pennsylvania Resources and Information in Special Education	King of Prussia	215/265-7321
Temple University	Philadelphia	215/787-8239 or 8204
Shippensburg University	Shippensburg	717/532-1474 or 1470

Puerto Rico (most complete collection in territory)

University of Puerto Rico	Rio Piedras	809/764-0000, x3227
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Rhode Island

Rhode Island College	Providence	401/456-8125
University of Rhode Island	Kings' n	401/792-2653

South Carolina

The Citadel	Charleston	803/792-5116
Winthrop College	Rock Hill	803/323-2131

South Dakota

South Dakota State Library and Archives	Pierre	605/773-3131
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Texas

Texas Education Agency	Austin	512/463-9050
University of Texas	Austin	512/471-5944
	El Paso	915/747-5417
Texas A&M University	College Station	409/845-5741
East Texas State University	Commerce	214/886-5719, 5720 or 5721

Texas(cont'd)

Dallas Baptist University	Dallas	214/331-8311, x221
Dallas Public Library	Dallas	214/749-4123
North Texas State University	Denton	817/565-3025
Texas Woman's University	Denton	817/566-6415
University of Houston	Houston	713/488-9295
Sam Houston State University	Huntsville	409/294-1613
Laredo State University	Laredo	512/722-8001, x402
Texas Tech University	Lubbock	806/742-2236
Southwest Texas State U.	San Marcos	512/245-2685 or 2352
Tarleton State University	Stephenville	817/968-9249

Tennessee

University of Tennessee	Chattanooga	615/755-4510
	Knoxville	615/974-4171
East Tennessee State University	Johnson City	615/929-5338 or 5345
Memphis State University	Memphis	901/454-2208
Vanderbilt University	Nashville	615/322-8095

Utah

Utah State University	Logan	801/750-2683 or 2636
Utah State Office of Education	Salt Lake City	801/533-4774

Vermont

Vermont Department of Ed.	Montpelier	802/828-3352
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Virgin Islands (most complete collection in territory)

College of the Virgin Islands	St. Thomas	809/774-9200, x1483, x1487
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Virginia

University of Virginia	Charlottesville	804/924-7040
Virginia Polytechnic Institute and State University	Falls Church	703/698-6011
James Madison University	Harrisonburg	703/568-6267
Radford University	Radford	703/731-5471

Washington

Western Washington University	Fellingham	206/676-3295
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DIRECTORY OF COMPLETE ERIC COLLECTIONS

Washington (cont'd)

Central Washington University	Ellensburg	509/963-1541
University of Washington	Seattle	206/543-0242 or 4164

West Virginia

Glenville State College	Glenville	304/462-7361, x311, x314
West Virginia College of Graduate Studies	Institute	304/768-9711
West Virginia University	Morgantown	304/293-5039

Wisconsin

University of Wisconsin	Eau Claire	715/836-5820
Wisconsin Department of Public Instruction	Madison	608/267-9267
University of Wisconsin	Oshkosh	414/424-3347
	Platteville	608/342-1667
	River Falls	715/425-3552 or 3738

Wyoming (only collection in state)

University of Wyoming	Laramie	307/766-5312
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SECTION 10

Anatomy of an ERIC Resume

We've noted in the previous sections that the database is a collection of **descriptions** of articles and documents about education, and provided **abbreviated** descriptions of 55 articles and documents. Now let's take a look at a **complete** description, or "resume," of an ERIC document.

Resumes, Cataloging, and Indexing

In a previous section we presented resumes that had been shortened to make them a bit more "user friendly." Now, let's take a look at a complete original resume, to help you get a better view of the structure of the ERIC database. Just scan the resume briefly:

AN: ED254324
 CHN: PS014941
 TI: Calendar of Reading, Writing, and Mathematics Skills, Grades K-3, 1984-85. A Guide for Parents.
 CS: Michigan State Board of Education, Lansing. Michigan Educational Assessment Program.
 PY: 1984
 NT: 44 p.
 PR: EDRS Price MF01/PC02 Plus Postage
 DT: Guides - Non-classroom (055)
 CP: U.S.; Michigan
 TA: Parents
 LA: English
 GL: State
 PG: 44
 DE: Grade-1; Grade-2; Home-Programs; Mathematics-Skills; Primary-Education; Reading-Skills; Study-Skills; Writing-Skills; *Basic-Skills; *Elementary-School-Students; *Home-Study; *Kindergarten-Children; *Learning-Activities; *Parent-Participation
 ID: Calendars-; Season- *Parent-as-a-Teacher
 IS: RIEJUL85
 AB: Following an introductory page providing guidelines for use, this calendar describes a daily learning

activity for children and parents to engage in together for about 10 minutes. Parents are urged to follow the daily activities as a means of supporting their children and their children's teachers. It is suggested that a parent's work with his or her child should (1) give additional practice on skills taught at school; (2) show that education is important to the parents; and (3) provide assurance to the parent that the child is performing at least at the minimum expected level for the grade range. While a few of the activities suggested for each month are seasonal, most tasks are not. Activities involve a range of skills: mathematics facts, measuring, reading, writing, listening and following directions, and oral language. The final pages of the calendar give parents additional suggestions about television alternatives, math activities, reading aloud to children, children's books and magazines, making books of children's work, and studying science and social studies textbooks. (CB)

LV: 1
CH: PS
FI: ED
DTN: 055

This particular resume contains 21 fields. Fields are places reserved for particular types of information. The fields from "AN:" through "PG:" and "LV:" through "DV:" are the **cataloging fields**. They present the kind of information you might, in fact, expect to find in a commercial catalog. These fields give you ample information to order the document described in the resume from the supplier, though such information can also be useful in searching the database.

After the cataloging fields there are two fields, one labelled "DE:" (for "descriptors") and the other labelled "ID:" (for "identifiers"). These are the **indexing fields**. They contain terms used to index the document. What does that mean? Think of books with indexes for an example. A book has an index so that you can find information quickly, without having to scan every page. The ERIC database is essentially a book with 750,000 pages. Obviously it needs an index.

The terms in the indexing fields, however, require your special attention. The **descriptors** (in the "DE:" field) are terms that the entire ERIC system has agreed to use after careful consideration. New descriptors are added routinely. The new descriptors come from the optional **identifier** field, but not all resumes contain identifiers. Descriptors and identifiers are typically one to three words in length.

For examples, see the list of terms relevant to the topic of "parents" in the section of this *Guide* titled "The Range of Information About Parents in the ERIC Database." Most of them are descriptors or identifiers.

Descriptors and identifiers are part of the ERIC system's **controlled vocabulary**. The controlled vocabulary contains about 10,000 descriptors and 40,000 identifiers at present. The descriptors appear in the *Thesaurus of ERIC Descriptors*, one of the most important tools for using the ERIC database. Identifiers, by the way, are experimental descriptors; if a particular identifier is used frequently it can be proposed by clearinghouse staff as a descriptor, in which case the *Thesaurus* will carefully describe it in relation to the other descriptors in the *Thesaurus*. See the section of this *Guide* titled "A Description of the Basic Tools Used in the ERIC Database" for a detailed discussion of the *Thesaurus*.

Resumes and Computer Searching

There is one other important structural feature of the database that merits attention. The entire database was, from the beginning (as early as 1964), designed to be **computer-searchable**. A great deal has happened to computers since then, of course, and you might expect that the ERIC system has made many improvements in computer searching since then. It has. In fact, the vision of the early 1960s is just now coming into its own, with the application of microcomputers, compact disks, and new searching software.

SECTION 11

A Brief Sketch of the ERIC System

The major work of the ERIC system is **building the ERIC database**. That statement sounds vague, but it means something quite definite. Recall that the database consists of descriptions of over 750,000 articles and documents about education produced since 1966 and microfiche reproductions of most of the documents. In other words, the ERIC system collects and describes, on average, about 35,000 articles and documents each year. Then it organizes them and makes them available to the public. That's a lot of reading, writing, editing, and printing.

But database building is just the beginning. The database and the descriptions of ERIC journal articles and ERIC documents are put together for one main purpose—to make them available to users. **Serving users**, then, is another main focus of the ERIC system. These services include document reproduction, electronic searches of the database, answering written and telephoned requests, and presenting workshops for various groups of users.

Finally, as the database grows in size, the ERIC system is **publishing summaries and syntheses** to help educators and citizens overview significant new literature in the database. The various specialized units of the system develop a variety of publications that pull together information about new topics or about topics of persistent interest. Sales of these publications are another service provided to users. Most of these publications are also available as paper-copy b'owbacks from EDRS.

Units in the ERIC System

The ERIC system does not do all its work in a single location; it is a decentralized system. The major units in the system, their specialized function, and their locations are indicated below:

1. Sixteen clearinghouses build the database by gathering and describing articles and documents in 16 specialized fields. Clearinghouses serve database users, publish summaries and syntheses, and build the database. They are located in different cities around the nation, and they are hosted by a variety of organizations. (See the "Directory of

ERIC Clearinghouses," in this *Guide*, for a complete list of clearinghouse addresses, telephone numbers, and areas of concern.)

2. Central ERIC is the central administrative unit of the ERIC system. It is located at the U.S. Department of Education in Washington, D.C., and coordinates the work of all ERIC units.
3. The ERIC Document Reproduction Service (EDRS) produces microfiche and paper copies of ERIC documents, so its main function is user services. It is located in Alexandria, Virginia.
4. The ERIC Processing and Reference Facility coordinates production of the indexes that make the ERIC database so useful, so its main function is building the database. It is located in Rockville, Maryland.
5. Oryx Press edits and publishes the index of journal articles and the *Thesaurus of ERIC Descriptors*. Its main function, therefore, is database building. It is located in Phoenix, Arizona.

The ERIC system, working through its 16 clearinghouses and four supporting units, has developed one of the most accessible and lowest-cost databases in the world.

GLOSSARY

AB \ "Abstract." An abstract is a brief description of an article or document. For ERIC Documents (ED accession numbers), abstracts can be up to 250 words in length. For ERIC journal articles (EJ accession numbers), abstracts can be up to 50 words in length. It is a field in ERIC resumes.

**Alphabetical Display ** The "Alphabetical Display of Descriptors" is the first section in the *Thesaurus of ERIC Descriptors*. The Alphabetical Display is the most complete display of the usage of ERIC descriptors.

AN \ "Accession Number." The accession number is the six-digit ED number assigned to ERIC documents or the six-digit EJ number assigned to ERIC journal articles. It is a field in ERIC resumes.

**article ** ERIC articles come from over 780 journals that publish studies, essays, and features about education. Each journal is assigned to one of the 16 clearinghouses. Some journals are covered "comprehensively," which means all articles are described by ERIC. Many journals, however, are covered "selectively," which means only articles selected by the clearinghouse staff are described.

**blowbacks ** Refers to paper copies enlarged from microfilm or microfiche copies of the original document.

BT \ "Broader Term." This abbreviation appears in the Alphabetical Display of Descriptors in the *Thesaurus of ERIC Descriptors*. It tells you that the given descriptor is more focused than the cited broader term.

CD-ROM \ "Compact-Disk, Read-Only-Memory." You are probably familiar with audio CDs. They can contain at least an hour of digitized music. When used to store digitized text, CDs can hold 200,000 typed pages.

CIJE \ "Current Index to Journals in Education." The CIJE is the paper index for journal articles described by ERIC. Issued in

mont . . . volumes and in semiannual cumulative volumes. Used in manual searches of the ERIC database.

clearinghouse \ The core work of the ERIC system is divided among 16 clearinghouses, each operating within a carefully defined specialty. Subject area experts scan the relevant literature in each clearinghouse, describe the best for the ERIC database, develop new publications in their scope areas, and provide services to clients who call, write, or visit.

database \ This is computer-age lingo for an archive, an organized body of information in permanent storage. This *Guide* describes the organization of the ERIC database, which is a body of information that describes articles and documents about education.

DIALOG \ DIALOG is a commercial "information utility." It provides computer access (over phone lines) to a variety of—you guessed it—databases. It also produces the ERIC database on CD-ROM.

Digest \ ERIC Digests are 1000-1500 word essays on critical or emerging topics in education. They are written simply and clearly, as an introduction to the topic, for a wide audience.

document \ ERIC documents comprise one-half of the ERIC database, the education literature that does not appear in journals. Documents can be reports, opinion papers, essays, papers presented at conferences, curriculum guides, and so forth. They are described in *Resources in Education* (the *RIE*). Accession numbers for ERIC documents all begin with the letters "ED."

EDRS \ "ERIC Document Reproduction Service." Located in Alexandria, VA, EDRS produces the ERIC microfiche on which ERIC documents are filmed. EDRS also produces microfiche and paper copies of ERIC documents for individual users. Orders can be placed by calling 800/227-3742.

ERIC \ "Educational Resources Information Center." The ERIC system consists of 16 clearinghouses and 4 supporting units.

field \ In an electronic database, a field is a place reserved for a particular kind of information, for example, the name of an author, the title of an article, and so forth. Each field has a name. In the examples of the ERIC database on CD-ROM in this *Guide*, field names are given as two-letter abbreviations.

GC \ "Group Code." The approximately 10,000 ERIC descriptors belong to one of 41 descriptor groups. [™] Group Code numbers in the Alphabetical Display refer to these descriptor groups. The groups to which the Group Code numbers refer are described at the back of the *Thesaurus of ERIC Descriptors*.

interlibrary loan \ Most libraries help their clients get books or articles that are not available locally. They do this by getting the books or articles from other libraries. When they do this, they are making an interlibrary loan.

LV \ "Level." A field in the ERIC database that tells whether the document is available as both a paper reproduction and a microfiche reproduction (level 1), a microfiche reproduction only (level 2), or whether it is not available at all from the ERIC system (level 3). The database, however, gives the information needed to order level 3 documents from the original source.

MF01, MF02, MF03, etc. \ "MF" stands for "microfiche." These codes appear in the PR ("price") field in the ERIC database and help you determine the EDRS price for a given document. The price per microfiche (which contains up to 96 pages) is currently eighty-two cents (\$.85). The code "MF03" means that you multiply the price per microfiche times 3 to find the price of the microfiche reproduction for a document carrying that code (that is, $3 \times \$.85 = \$ 2.55$).

microfiche \ A microfiche is about the size of a 3 x 5 index card. It is a form of "micrographic reproduction." Micrographics allows bulky documents to be stored in a minimum amount of space. From microfiche, a full-size document can be recreated as a blowback. Level 1 and level 2 ERIC documents are stored as microfiche.

microfilm \ Microfilm is the micrographic medium (see microfiche, above) used to store articles in journals. Many libraries archive their journals as microfilm. Microfilm is produced as a roll of film, and one roll may contain several years of articles in a particular journal. Full-size documents can be created as blowbacks.

NT \ "Narrower Term." In the Alphabetical Display of Descriptors, narrower terms to which the given descriptor is related are noted.

on-line \ Refers to computer activity carried on over telephone lines. On-line searching of the ERIC database is provided by a number of commercial firms.

PC01, PC02, PC03, etc. \ "PC" stands for "paper copy." These codes appear in the PR ("price") field in the ERIC database and help you determine the EDRS price for a given document. The price per paper copy is based on units of 25 pages. The code "PC03" means that you multiply the price per 25-page unit times 3 to find the price of the paper copy reproduction for a document carrying that code (that is, $3 \times \$2.00 = \6.00).

PG \ "Pages." The field in the ERIC database that reports the number of pages in an article or document.

PR \ "Price." The field in the ERIC database that helps you calculate the EDRS price for an ERIC document. (See "MF01, MF02, MF03, etc." and "PC01, PC02, PC03, etc.," above.)

reader/printers \ Reader/printers are machines on which users can read micrographic media (microfiche and microfilm), as well as produce full-size blowbacks.

resume \ In the ERIC database, a resume is the complete description of an ERIC document or journal article. A resume contains many fields, including a complete abstract that summarizes the content of the article or document.

RIE \ *Resources in Education*. The RIE is the index of ERIC documents (not journal articles) published in monthly installments and in annual cumulative volumes.

Rotated Display \ The second section of the *Thesaurus of ERIC Descriptors*, particularly useful for translating common English into the language used to index the ERIC database.

RT \ "Related Term." In the Alphabetical Display of Descriptors, terms to which the given descriptor is related at the same level (that is, neither broader nor narrower).

SN \ "Scope Note." Scope notes appear in the Alphabetical Display of Descriptors, and they tell how the ERIC system has agreed to use a descriptor. Not all descriptors have scope notes, however.

Thesaurus of ERIC Descriptors \ The key to using the ERIC database effectively, the thesaurus shows how descriptors are related to one another, tells how many times each descriptor has been used in the database, and often provides a guide to the meaning of the term (in scope notes) as used by the ERIC system. The descriptors are displayed in three ways: alphabetically (in the Alphabetical Display), as modified common English words (in the Rotated Display), and hierarchically (in the Two-Way Hierarchical Display).

TI \ "Title." The field in the ERIC database that reports the title of an ERIC document or article.

Two-Way Hierarchical Display \ The Hierarchical Display is the third major section of the *Thesaurus of ERIC Descriptors*. It shows the relationship of a descriptor to its related terms—narrower, broader, and at the same level.

UF \ "Used For." This code appears in the Alphabetical Display of Descriptors, and gives other terms that the descriptor is used for. Sometimes, descriptors are removed from the thesaurus, and they will be listed as UFs. Sometimes, terms commonly used in the literature, but not in the thesaurus, are listed as UFs.

UMI \ "University Microfilm, International." UMI produces microfilm copies of most ERIC journals, and will also produce paper copies for individual clients.

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